

10675833

=> d his

(FILE 'HOME' ENTERED AT 12:20:38 ON 28 APR 2004)

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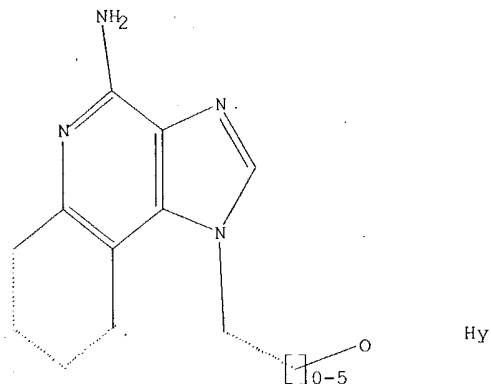
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L5 11 S L4

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L1 HAS NO ANSWERS

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Structure attributes must be viewed using STN Express query preparation.

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L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:892446 CAPLUS

DN 139:364934

TI Preparation of aryl ether substituted imidazoquinolines as immune response modifiers

IN Heppner, Philip D.; Charles, Leslie J.; Dellaria, Joseph F.; Merrill, Bryon A.; Mickelson, John W.

PA 3M Innovative Properties Co., USA

SO U.S. Pat. Appl. Publ., 97 pp., Cont.-in-part of U.S. Ser. No. 13,202.

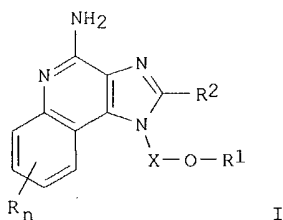
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 11

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PI	US 2003212092	A1	20031113	US 2002-165750	20020607
	US 6677348	B2	20040113		
	US 2003212091	A1	20031113	US 2001-13202	20011206
	US 6670372	B2	20031230		
	US 2004072858	A1	20040415	US 2003-675833	20030930
PRAI	US 2000-254218P	P	20001208		
	US 2001-13202	A2	20011206		
	US 2001-11921	A1	20011206		
OS	MARPAT 139:364934				
GI					



AB The title compds. [I; X = (CH₂)₂, CH₂CH₂, etc.; R₁ = alkenyl, aryl, R₄-aryl; R₂ = H, alkyl, alkenyl, etc.; R₄ = alkyl, alkenyl which may be interrupted by one or more O atoms; R₃ = H, alkyl; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain ether and aryl or alkenyl functionality at the 1-position, and are useful as immune response modifiers, were prepared. E.g., a multi-step synthesis of I [X = (CH₂)₂; R₁ = CH₂C.tplbond.CH; R₂ = H; n = 0] which showed the lowest effective concentration of 0.12 μM and 1.11 μM to induce biosynthesis of interferon α and TNFα in human cells, resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases. The pharmaceutical composition comprising the compound I is claimed.

IT **437600-93-6P 437602-57-8P 437602-63-6P**

437603-08-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl ether substituted imidazoquinolines as immune response modifiers)

RN 437600-93-6 CAPLUS

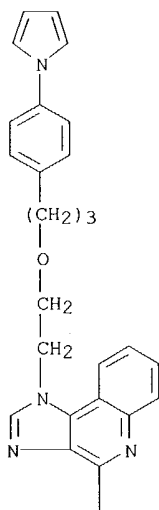
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-[4-(1H-pyrrol-1-yl)phenyl]propoxy]ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

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CRN 437600-92-5

CMF C25 H25 N5 O

PAGE 1-A



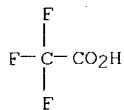
PAGE 2-A

NH₂

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CM 2

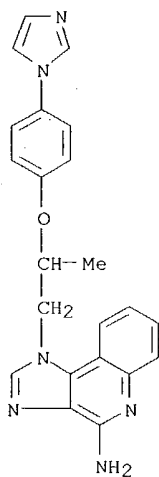
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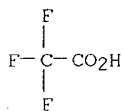
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CM 2

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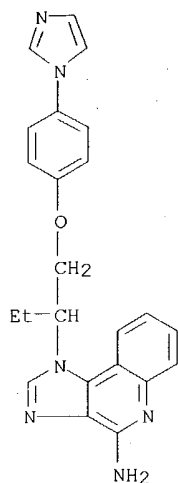


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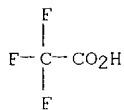
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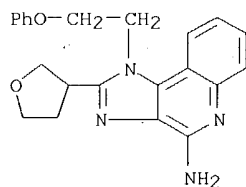


CM 2

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RN 437603-08-2 CAPLUS
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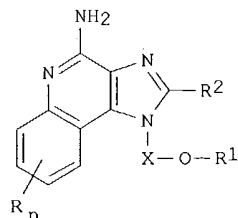


L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:777397 CAPLUS
DN 139:292250
TI Preparation of amido ether substituted imidazoquinolines as immune response modifiers
IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.
PA 3M Innovative Properties Co., USA
SO U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S. Ser. No. 11,670.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003187016	A1	20031002	US 2002-165449	20020607
	US 6664265	B2	20031216		
	US 2003096835	A1	20030522	US 2001-11670	20011206
	US 6660747	B2	20031209		
	US 2004072858	A1	20040415	US 2003-675833	20030930

10675833

	US 2004067975	A1	20040408	US 2003-681711	20031007
PRAI	US 2000-254218P	P	20001208		
	US 2001-11670	A2	20011206		
	US 2001-11921	A1	20011206		
	US 2002-165449	A1	20020607		
OS	MARPAT 139:292250				
GI					



AB The title compds. [I; X = (CH₂)₂, CH(Et)CH₂, etc.; R₁ = (CH₂)₄CONMePh, (CH₂)₂NHCO(cyclohexyl), (CH₂)₂NHCO(1-naphthyl), etc.; R₂ = H, alkyl, alkenyl, etc.; R = alkyl, alkoxy, OH, halo, CF₃; n = 0-4] and their pharmaceutically acceptable salts that contain ether and amide functionality at the 1-position, and are useful as immune response modifiers, were prepared. Thus, reacting 2-(1H-imidazo[4,5-c]quinolin-1-yl)ethanol with 5-bromo-N-methyl-N-phenylpentamide followed by treatment of the resulting N-oxide with trichloroacetyl isocyanate in CH₂Cl₂, and then treating the intermediate with NaOMe in MeOH afforded I [X = (CH₂)₂; R₁ = (CH₂)₄CONMePh; R₂ = H; n = 0] which showed interferon α induction in human cells at 3.33 μ M. The compds. I and compns. comprising I can induce the biosynthesis of various cytokines, and are useful in the treatment of a variety of conditions, including viral diseases and neoplastic diseases.

IT **436855-93-5P 436856-07-4P 436856-13-2P**
436856-20-1P 436856-21-2P 436856-22-3P
436856-23-4P 436856-24-5P 436856-25-6P
436856-26-7P 436856-27-8P 436856-28-9P
436856-29-0P 436856-30-3P 436856-31-4P
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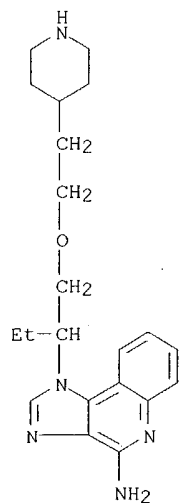
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amido ether substituted imidazoquinolines as immune response modifiers)

RN 436855-93-5 CAPLUS

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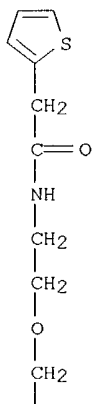
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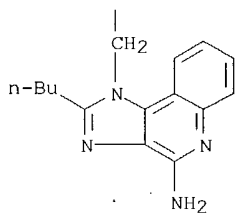
RN 436856-07-4 CAPLUS

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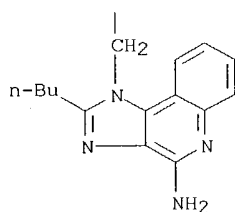
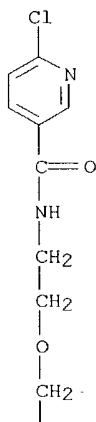


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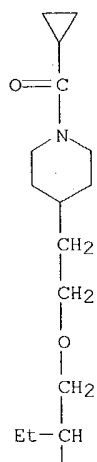


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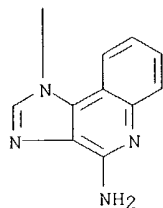
CN 3-Pyridinecarboxamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]-6-chloro- (9CI) (CA INDEX NAME)



RN 436856-20-1 CAPLUS
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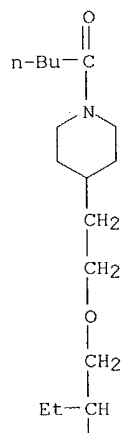


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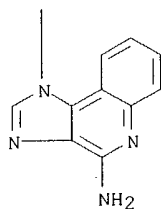


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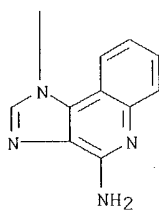
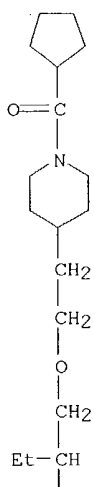
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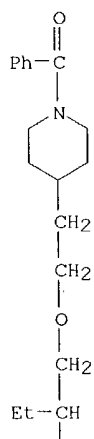
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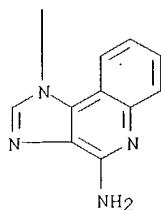


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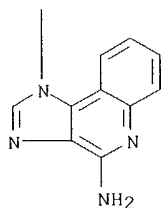
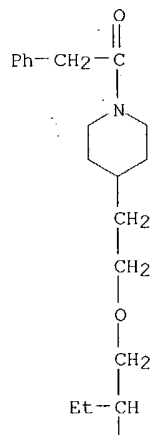


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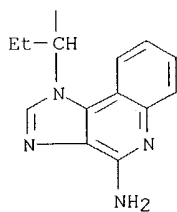
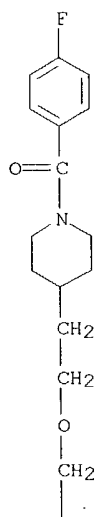




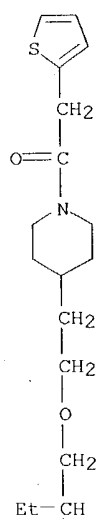
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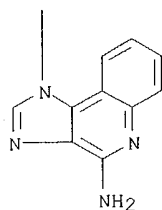
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RN 436856-26-7 CAPLUS
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 1-(2-thienylacetyl)- (9CI) (CA INDEX NAME)

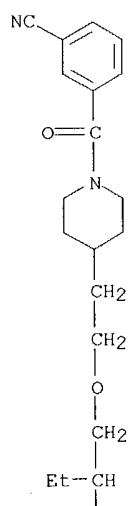


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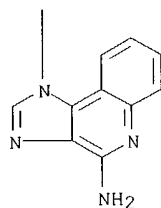


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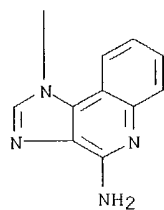
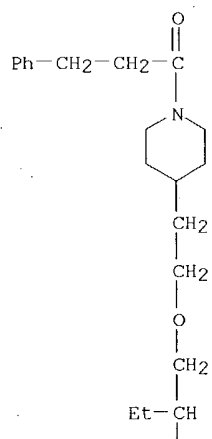
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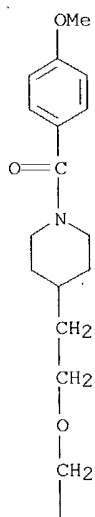
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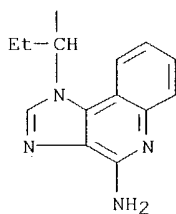


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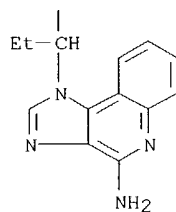
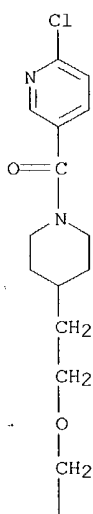


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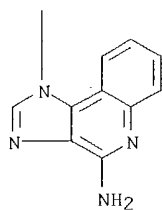
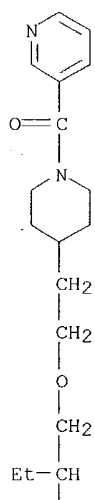




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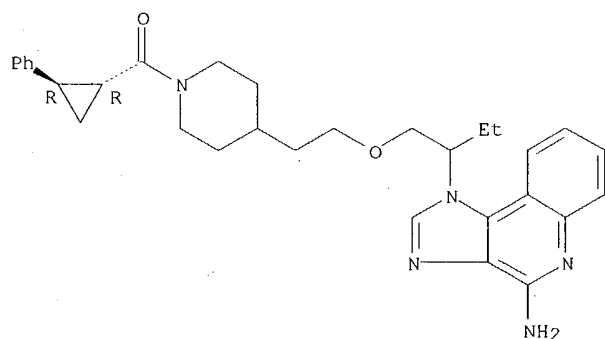


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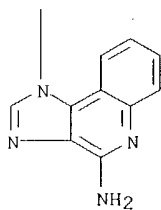
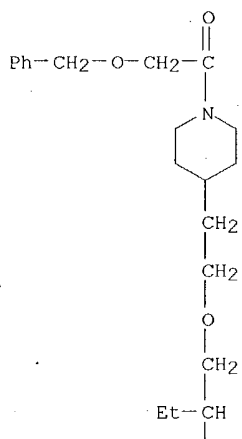


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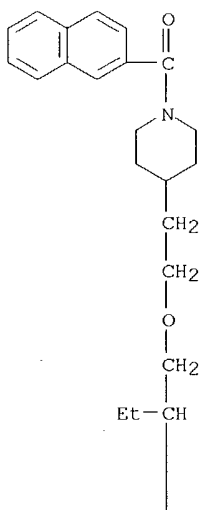
Relative stereochemistry.



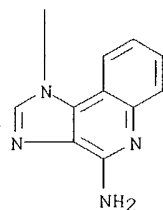
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RN 436856-36-9 CAPLUS
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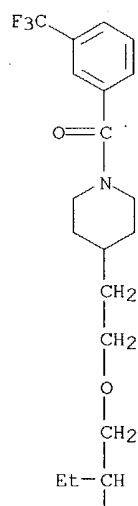


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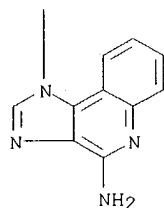


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PAGE 1-A

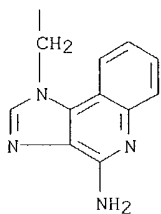


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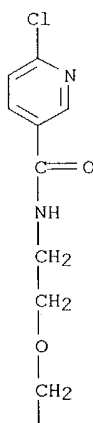
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PAGE 2-A

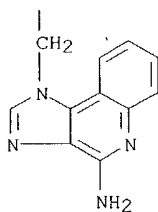


RN 436856-60-9 CAPLUS
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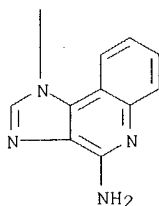
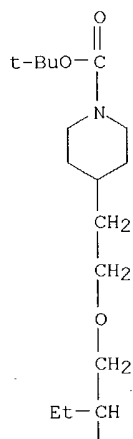
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PAGE 2-A

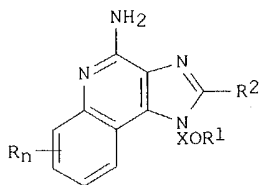


IT **436857-18-0P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of amido ether substituted imidazoquinolines as immune response
 modifiers)
 RN 436857-18-0 CAPLUS
 CN 1-Piperidinecarboxylic acid, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:570648 CAPLUS
 DN 139:133563
 TI Preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators.
 IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.; Roberts, Ralph R.; Wei, Ai-Ping
 PA 3M Innovative Properties Co., USA
 SO U.S. Pat. Appl. Publ., 46 pp., Cont.-in-part of U.S. Ser. No. 12,599.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003139441	A1	20030724	US 2002-165443	20020607
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	US 2002193396	A1	20021219	US 2001-12599	20011201
	US 6683088	B2	20040127		
	US 2004072858	A1	20040415	US 2003-675833	20030930
PRAI	US 2000-254218P	P	20001208		
	US 2001-12599	A2	20011201		
	US 2001-11921	A1	20011206		
OS	MARPAT 139:133563				
GI					



AB Title compds. [I; X = CHR5, CHR5, CHR5, R1 = R4NR3SO2R6A, R4NR3SOR7, R4NR3SO2NR5R6A, R4NR3SO2NH2; A = alkyl, alkenyl, aryl, heteroaryl, heterocyclyl; R2 = H, (substituted) alkyl, alkenyl, aryl, heteroaryl, heterocyclyl, alkyl-Y-alkyl, alkyl-Y-alkenyl, alkyl-Y-aryl; Y = O, S(O)0-2; R3 = H, alkyl, arylalkyl; R4 = alkyl, alkenyl, which may be interrupted by ≥ 1 O; R3R4 form a ring; R5 = H, alkyl, alkenyl; R6 = bond, alkyl, alkenyl, which may be interrupted by ≥ 1 O; R7 = alkyl; R3R7 form a ring; n = 0-4; R = alkyl, alkoxy, OH, halo, CF3], were prepared Thus, tert-Bu 2-[2-[(3-aminoquinolin-4-yl)amino]ethoxy]ethylcarbamate (preparation given) in CH2Cl2 was cooled to 0° and treated with Et3N and methoxypropionyl chloride; The reaction was then warmed to room temperature and stirring was continued for 1 h to give tert-Bu 2-[2-[2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethylcarbamate. This was converted to N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]methanesulfonamide in several steps. I showed interferon induction in human cells with lowest effective concns. of 0.0001-1 μ M.

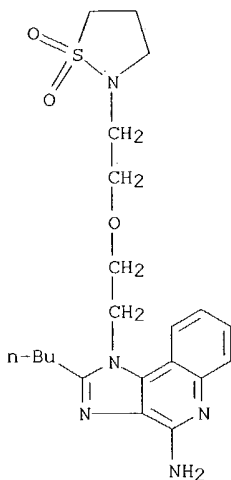
IT **437382-54-2P**, 2-Butyl-1-[2-[2-(1,1-dioxidoisothiazolidin-2-yl)ethoxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **437382-60-0P**
437382-69-9P 437382-76-8P 437382-77-9P
437382-78-0P 437382-79-1P 437382-80-4P
437382-81-5P 437382-82-6P 437382-83-7P
437382-84-8P 437382-85-9P 437382-86-0P
437382-87-1P 437382-88-2P 565454-61-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators)

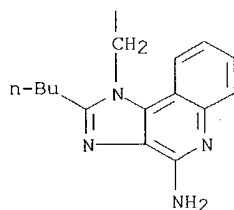
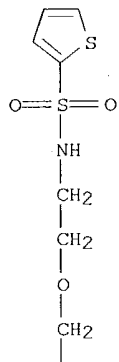
RN 437382-54-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[2-(1,1-dioxido-2-isothiazolidinyl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

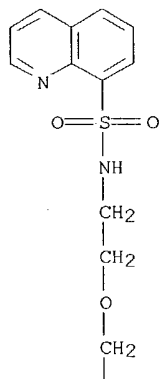


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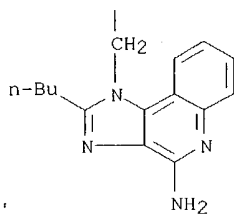
CN 2-Thiophenesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 437382-69-9 CAPLUS
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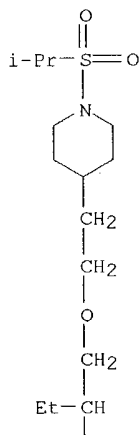


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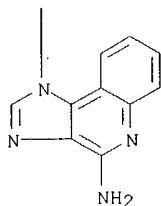


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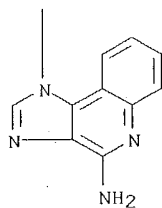
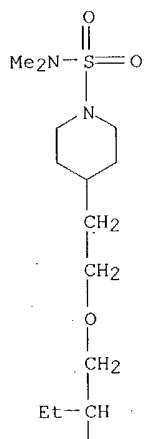
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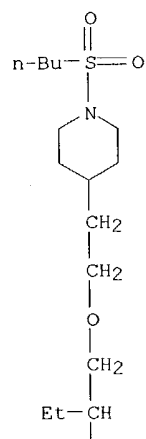
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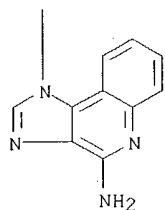
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 CN 1-Piperidinesulfonamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 437382-78-0 CAPLUS
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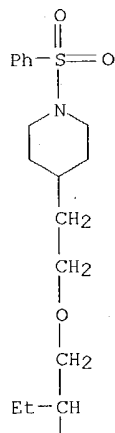


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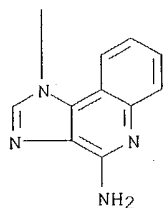


RN 437382-79-1 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
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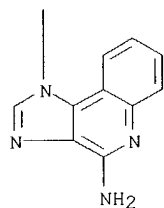
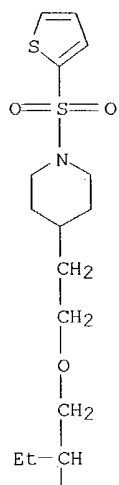
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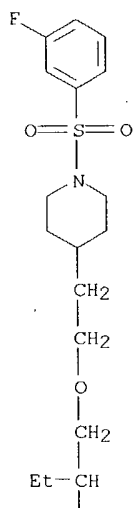
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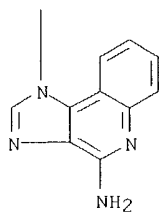
RN 437382-80-4 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-(2-thienylsulfonyl)- (9CI) (CA INDEX NAME)



RN 437382-81-5 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[(3-fluorophenyl)sulfonyl]- (9CI) (CA INDEX NAME)



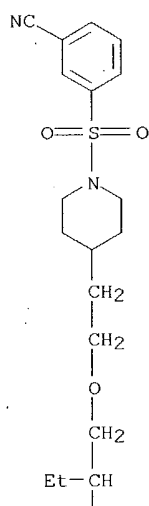
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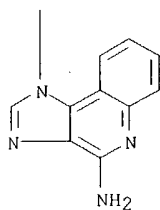
RN 437382-82-6 CAPLUS

CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
1-[(3-cyanophenyl)sulfonyl]- (9CI) (CA INDEX NAME)

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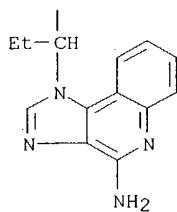
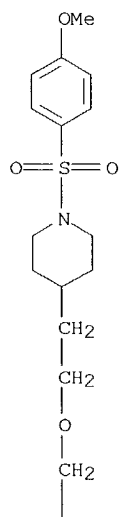


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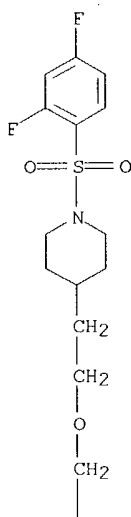


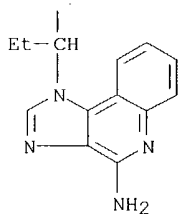
RN 437382-83-7 CAPLUS

CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
1-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

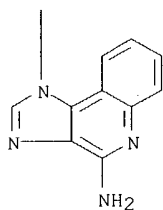
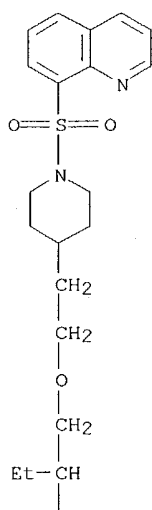


RN 437382-84-8 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[(2,4-difluorophenyl)sulfonyl]- (9CI) (CA INDEX NAME)

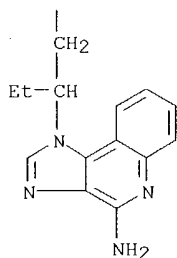
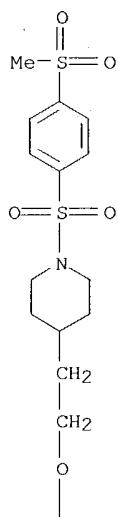




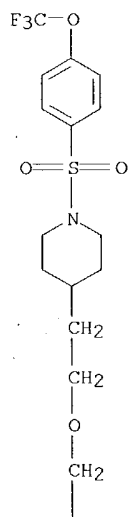
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 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-(8-quinolinylsulfonyl)- (9CI) (CA INDEX NAME)



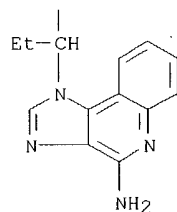
RN 437382-86-0 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[[4-(methylsulfonyl)phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



RN 437382-87-1 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[[4-(trifluoromethoxy)phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

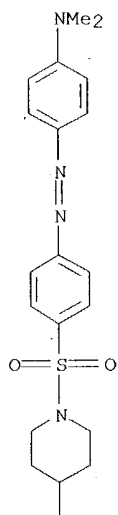


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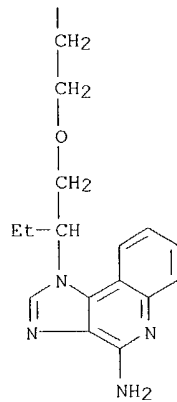


RN 437382-88-2 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[[4-[[4-(dimethylamino)phenyl]azo]phenyl]sulfonyl]- (9CI) (CA INDEX
 NAME)

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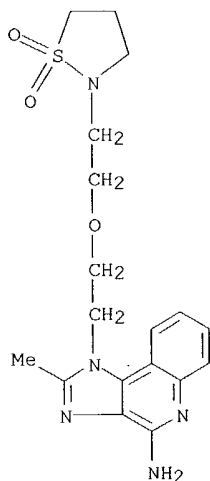
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RN 565454-61-7 CAPLUS

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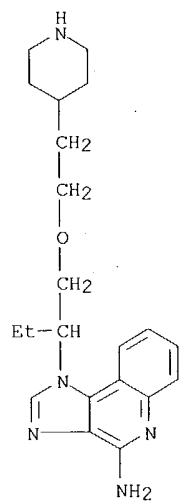
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[2-(1,1-dioxido-2-isothiazolidinyl)ethoxy]ethyl]-2-methyl- (9CI) (CA INDEX NAME)



IT **436855-93-5P**, 1-[1-[(2-(Piperidin-4-yl)ethoxy)methyl]propyl]-1H-imidazo[4,5-c]quinolin-4-amine **436857-18-0P**, tert-Butyl 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]piperidine-1-carboxylate
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators)

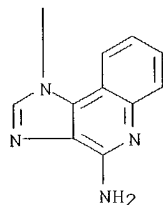
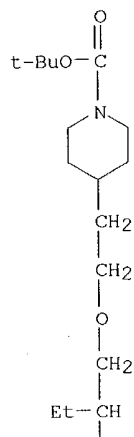
RN 436855-93-5 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[1-[[2-(4-piperidinyl)ethoxy]methyl]propyl]- (9CI) (CA INDEX NAME)



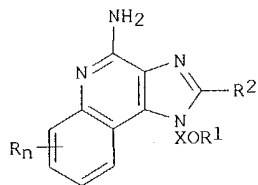
RN 436857-18-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:532388 CAPLUS
 DN 139:101126
 TI Preparation of 4-amino-1-(ureidoethoxyethyl)imidazoquinolines as inducers
 of cytokine biosynthesis for treatment of viral and neoplastic disease.
 IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill,
 Bryon A.
 PA 3M Innovative Properties Co., USA
 SO U.S. Pat. Appl. Publ., 43 pp., Cont.-in-part of U.S. Ser. No. 13,060.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	US 2004072858	A1	20040415	US 2003-675833	20030930
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	US 2004077678	A1	20040422	US 2003-680989	20031007
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	US 2001-13060	A2	20011206		
	US 2001-11921	A1	20011206		
	US 2002-164816	A1	20020607		
OS	MARPAT 139:101126				
GI					



AB Title compds. [I; X = CHR5, CHR5A; A = alkylene, alkenylene; R1 = R4NR8CR3NR5ZR6A1, R4NR8CR3NR5R7, R4NR8CR3NR9ZR6A1; A1 = alkyl, alkenyl, aryl, heteroaryl, heterocyclyl; R2 = H, alkyl, alkenyl, aryl, heteroaryl, heterocyclyl, alkyl-Y-alkyl, alkyl-Y-alkenyl, alkyl-Y-aryl, alkyl, alkenyl substituted by ≥ 1 of: OH, halo, N(R5)2, CON(R5)2, CO-C1-10 alkyl, CO2-C1-10 alkyl, N3, aryl, heteroaryl, heterocyclyl, CO-aryl, CO-heteroaryl; R3 = O, S; R4 = alkyl, alkenyl, which may be interrupted by ≥ 1 O; R5 = H, C1-10 alkyl; R6 = bond, alkyl, alkenyl, which may be interrupted by ≥ 1 O; R7 = H, C1-10 alkyl which may be interrupted by a heteroatom; R7R5 = atoms to form a ring; R8 = H, C1-10 alkyl, arylalkyl; R4R8 = atoms to form a ring; R9 = C1-10 alkyl which can join together with R8 to form a ring; Y = O, S, SO, SO2; Z = bond, CO, SO2; n = 0-4; R = C1-10 alkyl, C1-10 alkoxy, OH, halo, CF3], were prepared. Thus, title compound I (R1 = morpholinocarbonylaminoethyl; X = CH2CH2; R2 = Bu; R = null) (general preparation given) induced interferon and tumor necrosis factor in human cells at lowest effective concns. of 0.0001 μ M and 0.1 μ M, resp.

IT **437383-08-9P**, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]morpholine-4-carboxamide **437383-09-0P**, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methylmorpholine-4-carboxamide **437383-14-7P**
437383-25-0P 437383-26-1P 437383-27-2P
437383-28-3P 437383-29-4P 437383-30-7P
437383-31-8P 437383-32-9P 437383-33-0P
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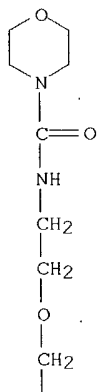
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminoureidoethoxyethylimidazoquinolines as inducers of cytokine biosynthesis for treatment of viral and neoplastic disease)

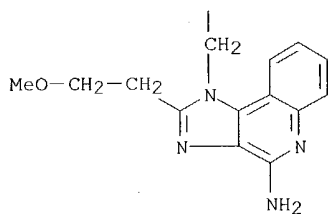
RN 437383-08-9 CAPLUS

CN 4-Morpholinecarboxamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

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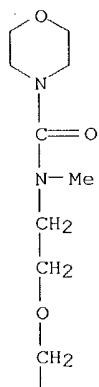


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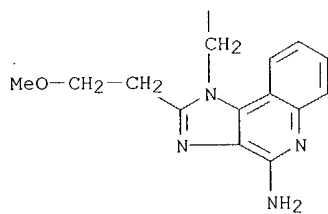


RN 437383-09-0 CAPLUS
 CN 4-Morpholinecarboxamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)

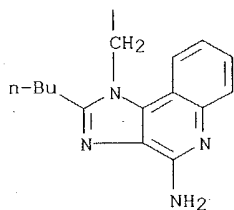
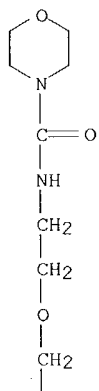
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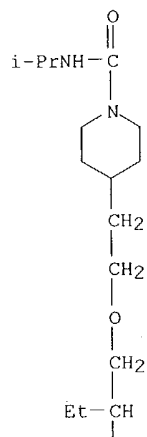
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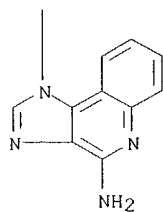
RN 437383-14-7 CAPLUS
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RN 437383-25-0 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



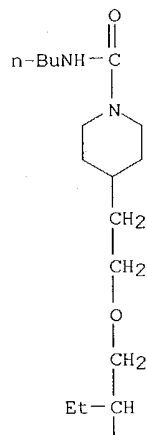
PAGE 2-A



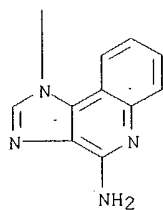
RN 437383-26-1 CAPLUS

CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-butyl- (9CI) (CA INDEX NAME)

PAGE 1-A

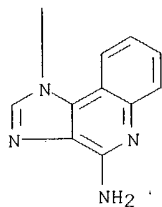
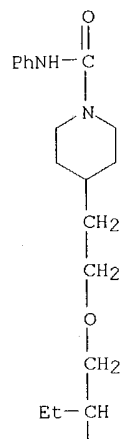


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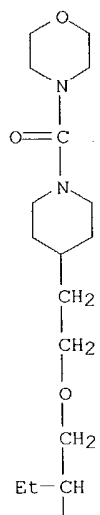


RN 437383-27-2 CAPLUS

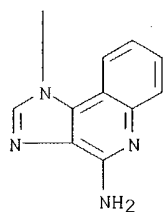
CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-phenyl- (9CI) (CA INDEX NAME)



RN 437383-28-3 CAPLUS
 CN Morpholine, 4-[[4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

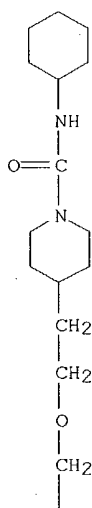


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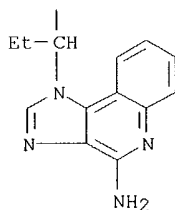


RN 437383-29-4 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

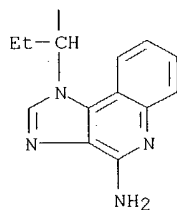
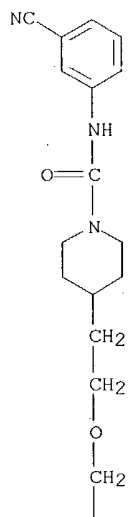
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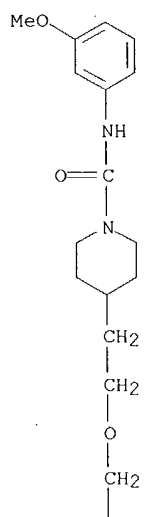
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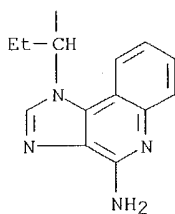


RN 437383-30-7 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-(3-cyanophenyl)- (9CI) (CA INDEX NAME)



RN 437383-31-8 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

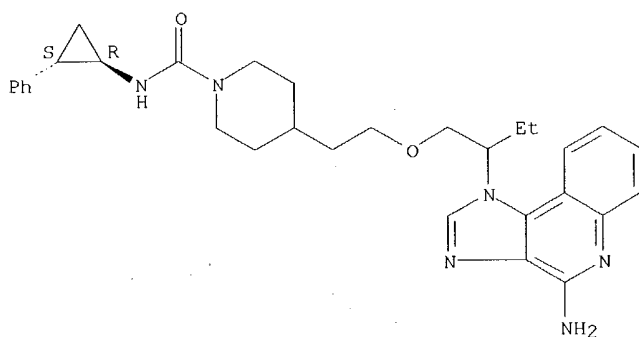




RN 437383-32-9 CAPLUS

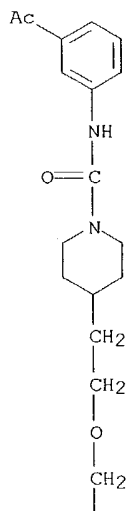
CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-[(1R,2S)-2-phenylcyclopropyl]-, rel- (9CI) (CA INDEX NAME)

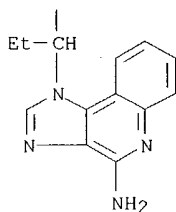
Relative stereochemistry.



RN 437383-33-0 CAPLUS

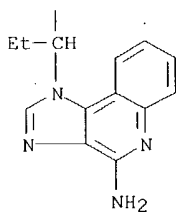
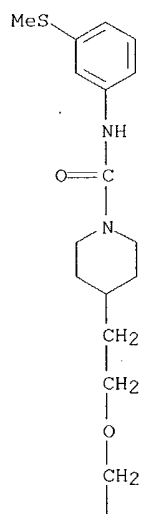
CN 1-Piperidinecarboxamide, N-(3-acetylphenyl)-4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]- (9CI) (CA INDEX NAME)





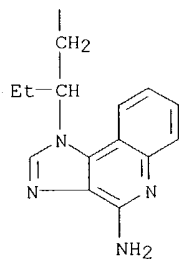
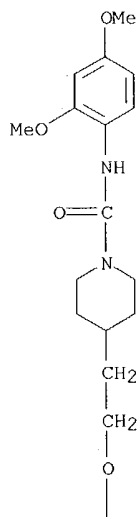
RN 437383-34-1 CAPLUS

CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-[3-(methylthio)phenyl]- (9CI) (CA INDEX NAME)

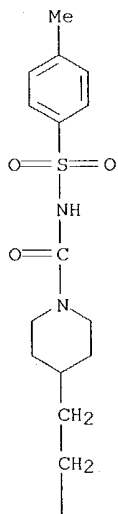


RN 437383-35-2 CAPLUS

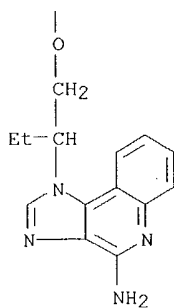
CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)



RN 437383-36-3 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

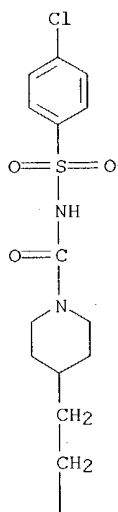


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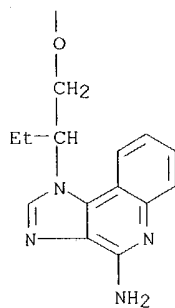


RN 437383-37-4 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-[(4-chlorophenyl)sulfonyl]- (9CI) (CA INDEX NAME)

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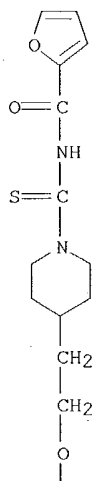


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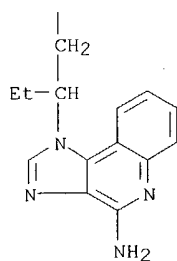


RN 437383-38-5 CAPLUS
 CN 2-Furancarboxamide, N-[[4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-piperidinyl]thioxomethyl]- (9CI) (CA INDEX NAME)

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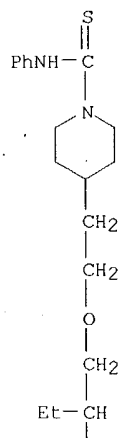


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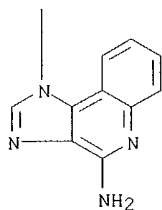


RN 437383-39-6 CAPLUS
 CN 1-Piperidinecarbothioamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-phenyl- (9CI) (CA INDEX NAME)

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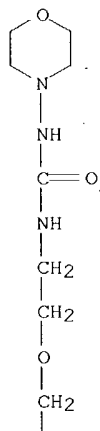


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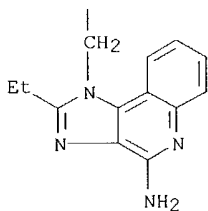


RN 557787-34-5 CAPLUS
 CN Urea, N-[2-[2-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]-N'-4-morpholinyl- (9CI) (CA INDEX NAME)

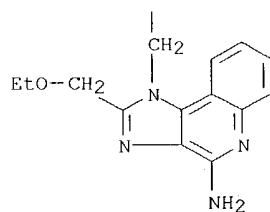
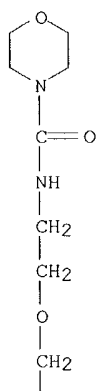
PAGE 1-A



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RN 557787-37-8 CAPLUS
 CN 4-Morpholinecarboxamide, N-[2-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]- (9CI) (CA INDEX NAME)



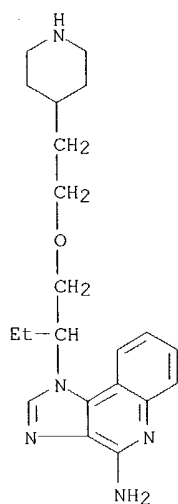
IT 436855-93-5P 436857-18-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aminoureidoethoxyethylimidazoquinolines as inducers of cytokine biosynthesis for treatment of viral and neoplastic disease)

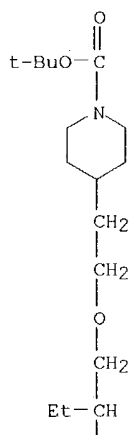
RN 436855-93-5 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[1-[[2-(4-piperidinyl)ethoxy]methyl]propyl]- (9CI) (CA INDEX NAME)

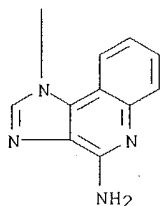


RN 436857-18-0 CAPLUS
 CN 1-Piperidinecarboxylic acid, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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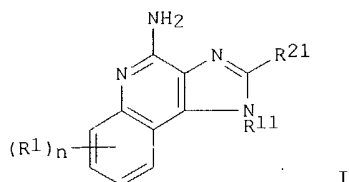


L5 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:434369 CAPLUS
 DN 139:26620
 TI Topical pharmaceuticals comprising an immune response modifier
 IN Skwierczynski, Raymond D.; Busch, Terri F.; Gust-Heiting, Amy L.;
 Fretland, Mary T.; Scholz, Matthew T.
 PA 3M Innovative Properties Company, USA
 SO PCT Int. Appl., 123 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003045391	A1	20030605	WO 2002-US38190	20021127
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

10675833

US 2003199538 A1 20031023 US 2002-306019 20021127
PRAI US 2001-340605P P 20011129
US 2002-378452P P 20020506
OS MARPAT 139:26620
GI



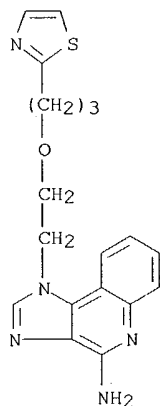
AB Pharmaceutical formulations comprise an immune response modifier (IRM) chosen from imidazoquinoline amines, imidazotetrahydroquinoline amines, imidazopyridine amines, and other heterocyclic fused ring derivs.; a fatty acid; and a hydrophobic, aprotic component miscible with the fatty acid are useful for the treatment of dermal associated conditions. Topical formulations containing, e.g., I are provided. In one embodiment, the topical formulations are advantageous for treatment of actinic keratosis, postsurgical scars, basal cell carcinoma, atopic dermatitis, and warts.

IT 436157-85-6 436157-88-9 436158-10-0

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical pharmaceuticals comprising an immune response modifier)

RN 436157-85-6 CAPLUS

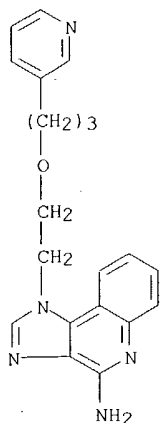
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(2-thiazolyl)propoxy]ethyl]-
(9CI) (CA INDEX NAME)



RN 436157-88-9 CAPLUS

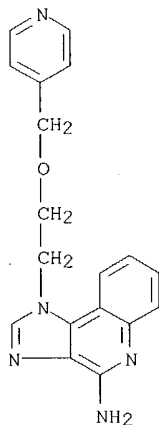
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(3-pyridinyl)propoxy]ethyl]-
(9CI) (CA INDEX NAME)

10675833



RN 436158-10-0 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(4-pyridinylmethoxy)ethyl]- (9CI)
(CA INDEX NAME)



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:417574 CAPLUS

DN 139:929

TI Toll-like receptor (TLR) pathway-based methods for identification of
immune response modifier (IRM) compounds, and methods of use of such
compounds

IN Gorden, Keith B.; Qiu, Xiaohong; Tomai, Mark A.; Vasilakos, John P.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003043572	A2	20030530	WO 2002-US36758	20021114
	WO 2003043572	A3	20030724		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT,
TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004014779 A1 20040122 US 2002-294935 20021114

PRAI US 2001-332412P P 20011116

AB Methods for identifying a compound that activates a TLR-mediated cellular signaling pathway is disclosed. The method includes (a) exposing a TLR-pos. cell culture to a test compound and measuring a TLR-mediated cellular response; (b) exposing a TLR-neg. cell culture to a test compound and measuring a TLR-mediated cellular response; and (c) identifying the test compound as an IRM if the cellular response in the TLR-pos. cell culture is greater than the cellular response of the TLR-neg. cell culture. Methods of eliciting a TLR-mediated cellular response are also disclosed. Such methods include administration of an IRM compound to an IRM-responsive cell so that the IRM compds. affects at least one TLR-mediate cellular signaling pathway.

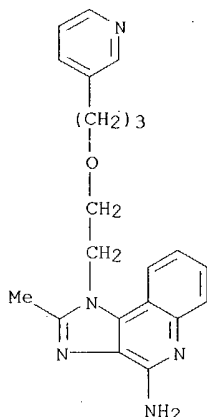
IT 436158-55-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(toll-like receptor pathway-based methods for identification of immune response modifier compds., and methods of use of such compds.)

RN 436158-55-3 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[2-[3-(3-pyridinyl)propoxy]ethyl]- (9CI) (CA INDEX NAME)



LS ANSWER 7 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:449684 CAPLUS

DN 137:33299

TI Preparation of heterocyclic ether substituted imidazoquinolines as immune response modulators for treatment of viral and neoplastic diseases

IN Charles, Leslie J.; Dellaria, Joseph F.; Griesgraber, George W.; Heppner, Philip D.; Manske, Karl J.; Mickelson, John W.; Rice, Michael J.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 11

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002046193	A2	20020613	WO 2001-US46704	20011206
WO 2002046193	A3	20030227		

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,

this app

BE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

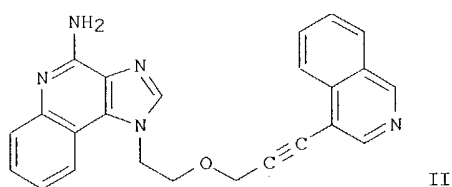
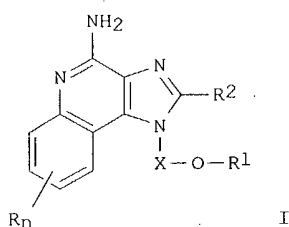
AU 2002030618	A5	20020618	AU 2002-30618	20011206
US 2003065005	A1	20030403	US 2001-11921	20011206
US 6664260	B2	20031216		
EP 1339715	A2	20030903	EP 2001-990852	20011206

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

BR 2001016047	A	20030930	BR 2001-16047	20011206
EE 200300271	A	20031015	EE 2003-271	20011206
NO 2003002596	A	20030606	NO 2003-2596	20030606
US 2004072858	A1	20040415	US 2003-675833	20030930

PRAI US 2000-254218P P 20001208
 US 2001-11921 A1 20011206
 WO 2001-US46704 W 20011206

OS MARPAT 137:33299
 GI



AB Title (tetrahydro)imidazoquinolines that contain ether and heterocyclyl or heteroaryl functionality at the 1-position [I; wherein X = CHR3, CHR3-alkyl, or CHR3-alkenyl; R = independently alkyl, alkoxy, OH, halo, or CF3; R1 = heteroaryl, heterocyclyl, R4-heteroaryl, or R4-heterocyclyl; R2 = H, alkyl, alkenyl, (hetero)aryl, heterocyclyl, alkyl-Y-alkyl; alkyl-Y-alkenyl, or alkyl-Y-aryl in which the alkyl and alkenyl groups may be substituted; R3 = independently H or alkyl; R4 = alkyl or alkenyl, which may be interrupted by one or more O groups; Y = independently O or S(O)0-2; n = 0-4; or their pharmaceutically acceptable salts] were prepared as immune response modifiers which can induce the biosynthesis of various cytokines. For example, 2-(1H-imidazo[4,5-c]quinolin-1-yl)-1-ethanol was treated with NaOH and propargyl bromide in CH2Cl2 to give the ether. Oxidization using 3-chloroperoxybenzoic acid afforded the 5N-oxide, which was reacted with trichloroacetyl isocyanate and hydrolyzed to give the amine. BOC protection, followed by addition of 4-bromoisoquinoline in the presence of Pd(PPh3)2Cl2 and TEA in DMF and treatment with TEA under nitrogen, afforded II. II induced interferon (IFN) and tumor necrosis factor α (TNF- α) in human blood cell systems with at concns. of 0.12 μ M and 3.33 μ M, resp. Thus, I are useful in the treatment of a variety of conditions, including viral and neoplastic diseases (no data).

IT 436157-88-9P 436158-24-6P 436158-26-8P

436158-28-0P, 1-[1-[[[5-Chloro-1-benzothien-3-yl)methoxy]methyl]-2-methylpropyl]-1H-imidazo[4,5-c]quinolin-4-amine 436158-30-4P, 1-[2-[[[5-Chloro-1-benzothien-3-yl)methoxy]propyl]-1H-imidazo[4,5-c]quinolin-4-amine 436158-32-6P, 1-[2-[[[3-Nitropyridin-2-yl)oxy]propyl]-1H-imidazo[4,5-c]quinolin-4-amine 436158-69-9P

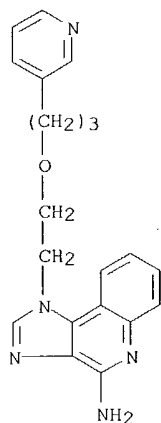
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(immune response modulator; preparation of heterocyclic ether substituted imidazoquinolines as immune response modulators for treatment of viral and neoplastic diseases)

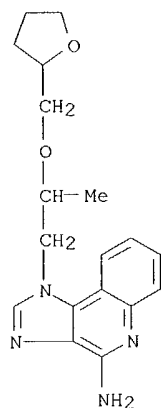
RN 436157-88-9 CAPLUS

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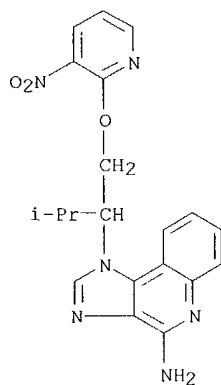
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(3-pyridinyl)propoxy]ethyl]-
(9CI) (CA INDEX NAME)



RN 436158-24-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[(tetrahydro-2-furanyl)methoxy]propyl]- (9CI) (CA INDEX NAME)



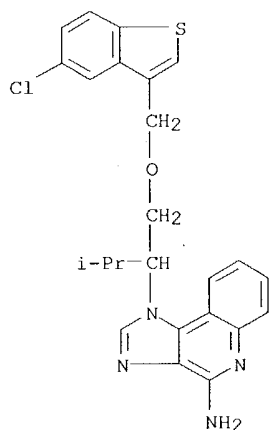
RN 436158-26-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-methyl-1-[(3-nitro-2-pyridinyl)oxy]methyl]propyl]- (9CI) (CA INDEX NAME)



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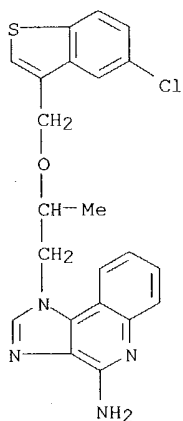
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CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[1-[(5-chlorobenzo[b]thien-3-yl)methoxy]methyl]-2-methylpropyl)- (9CI) (CA INDEX NAME)



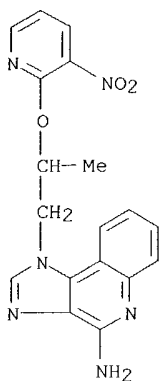
RN 436158-30-4 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[(5-chlorobenzo[b]thien-3-yl)methoxy]propyl)- (9CI) (CA INDEX NAME)



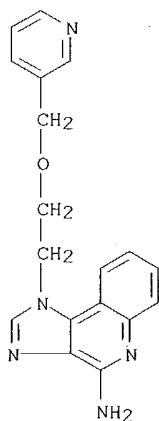
RN 436158-32-6 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[(3-nitro-2-pyridinyl)oxy]propyl)- (9CI) (CA INDEX NAME)



RN 436158-69-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(3-pyridinylmethoxy)ethyl]- (9CI)
(CA INDEX NAME)



IT **436157-65-2P**, 1-[2-[[3-(Isoquinolin-4-yl)-2-propynyl]oxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436157-71-0P**, 1-[2-[[3-(1,3-Thiazol-2-yl)-2-propynyl]oxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436157-73-2P**, 1-[2-[3-(1H-Pyrazol-4-yl)propoxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436157-75-4P**, 1-[2-(3-Pyrimidin-2-ylpropoxy)ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436157-79-8P** **436157-82-3P** **436157-85-6P**, 1-[2-[3-(1,3-Thiazol-2-yl)propoxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436157-89-0P** **436157-93-6P** **436157-96-9P** **436157-97-0P** **436157-98-1P**, 1-[2-[[1-[(Phenylsulfanyl)methyl]-1H-1,2,3-triazol-4-yl]methoxy]ethyl]-1H-imidazo[4,5-c]quinoline-4-amine **436157-99-2P**, 1-[2-[[1-[(Phenylsulfanyl)methyl]-1H-1,2,3-triazol-5-yl]methoxy]ethyl]-1H-imidazo[4,5-c]quinoline-4-amine **436158-00-8P**, 1-[2-(Benzo[b]furan-2-ylmethoxy)ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-02-0P** **436158-08-6P**, 1-[2-(Pyridin-2-ylmethoxy)ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-10-0P**, 1-[2-(Pyridin-4-ylmethoxy)ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-12-2P**, 1-[2-[[3-(5-Dimethylisoxazol-4-yl)methoxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-14-4P**, 1-[2-[[3-(Pyrimidin-2-yl)-2-propynyl]oxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-15-5P** **436158-16-6P**, 1-[2-[[3-(Pyrid-4-yl)-2-propynyl]oxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-17-7P**, 1-[2-[[3-(Pyrid-4-yl)-2-propynyl]oxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine bis(trifluoroacetate) **436158-18-8P**, 1-[2-[[3-(Fur-3-yl)-2-propynyl]oxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-19-9P**, 1-[2-[[3-(Fur-3-yl)-2-propynyl]oxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine trifluoroacetate (1:1) **436158-20-2P**, 4-[3-[2-(4-Amino-1H-

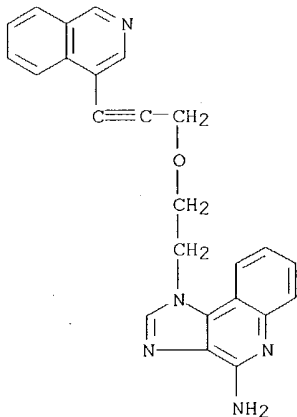
imidazo[4,5-c]quinolin-1-yl)ethoxy]propyn-1-yl]thiophen-2-ylcarboxaldehyde
436158-21-3P, 4-[3-[2-(4-Amino-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]propyn-1-yl]thiophen-2-ylcarboxaldehyde trifluoroacetate (1:1)
436158-22-4P, 1-[2-[[3-(Pyrid-2-yl)-2-propynyl]oxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-23-5P 436158-25-7P**
436158-27-9P 436158-29-1P 436158-31-5P
436158-33-7P 436158-34-8P, 1-[2-Methyl-1-[(pyrid-2-yloxy)methyl]propyl]-1H-imidazo[4,5-c]quinoline-4-amine
436158-35-9P 436158-37-1P, 1-[1-[(Pyrid-2-yloxy)methyl]propyl]-1H-imidazo[4,5-c]quinoline-4-amine
436158-38-2P 436158-39-3P, 1-[2-(9H-Carbazol-3-yloxy)propyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-40-6P**
436158-41-7P 436158-45-1P, 1-[2-[(1-Methyl-1H-indol-2-yl)methoxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **436158-47-3P**
436158-55-3P 436158-57-5P 436158-59-7P
436158-61-1P 436158-66-6P, 1-[2-[3-(1H-4-Pyrazolyl)propoxy]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine
436158-67-7P, 1-[2-[(1-Benzyl-1H-1,2,3-triazol-4-yl)methoxy]ethyl]-1H-imidazo[4,5-c]quinoline-4-amine **436158-68-8P**,
 1-[2-[(1-Benzyl-1H-1,2,3-triazol-5-yl)methoxy]ethyl]-1H-imidazo[4,5-c]quinoline-4-amine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(immune response modulator; preparation of heterocyclic ether substituted imidazoquinolines as immune response modulators for treatment of viral and neoplastic diseases)

RN 436157-65-2 CAPLUS

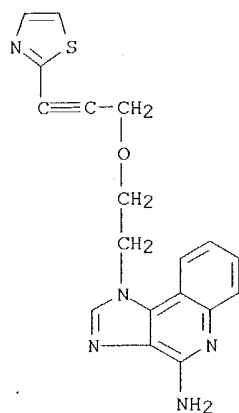
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(4-isoquinolinyl)-2-propynyl]oxy]ethyl]- (9CI) (CA INDEX NAME)



RN 436157-71-0 CAPLUS

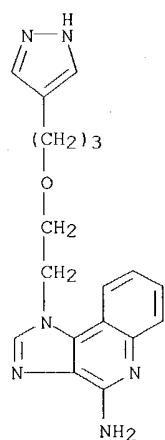
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(2-thiazolyl)-2-propynyl]oxy]ethyl]- (9CI) (CA INDEX NAME)

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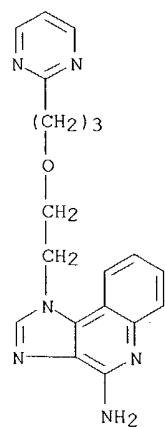
RN 436157-73-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(1H-pyrazol-4-yl)propoxy]ethyl]-
(9CI) (CA INDEX NAME)



RN 436157-75-4 CAPLUS

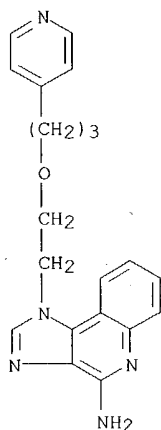
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(2-pyrimidinyl)propoxy]ethyl]-
(9CI) (CA INDEX NAME)



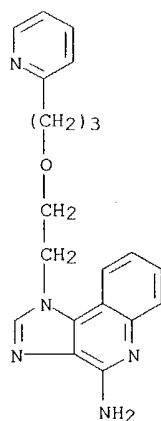
RN 436157-79-8 CAPLUS

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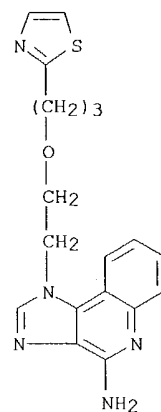
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(4-pyridinyl)propoxy]ethyl]-
(9CI) (CA INDEX NAME)



RN 436157-82-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(2-pyridinyl)propoxy]ethyl]-
(9CI) (CA INDEX NAME)



RN 436157-85-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(2-thiazolyl)propoxy]ethyl]-
(9CI) (CA INDEX NAME)



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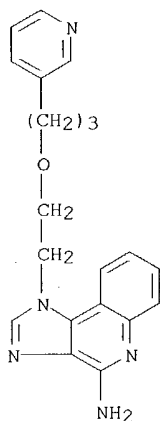
RN 436157-89-0 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(3-pyridinyl)propoxy]ethyl]-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436157-88-9

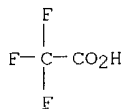
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CM 2

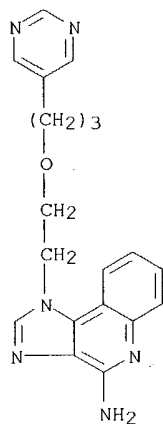
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CMF C2 H F3 O2



RN 436157-93-6 CAPLUS

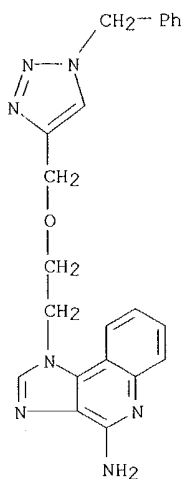
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(5-pyrimidinyl)propoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 436157-96-9 CAPLUS

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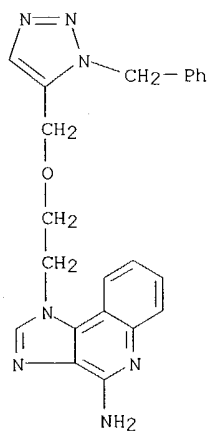
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[1-(phenylmethyl)-1H-1,2,3-triazol-4-yl]methoxy]ethyl]-, hydrochloride (20:19) (9CI) (CA INDEX NAME)



●19/20 HCl

RN 436157-97-0 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[1-(phenylmethyl)-1H-1,2,3-triazol-5-yl]methoxy]ethyl]-, hydrochloride (20:19) (9CI) (CA INDEX NAME)

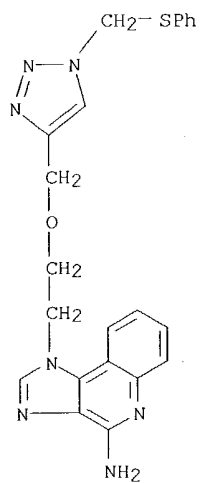


●19/20 HCl

RN 436157-98-1 CAPLUS

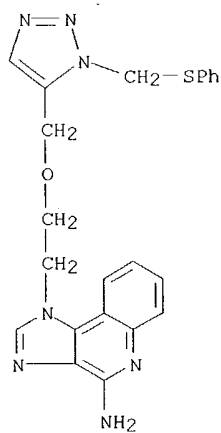
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[1-[(phenylthio)methyl]-1H-1,2,3-triazol-4-yl]methoxy]ethyl]- (9CI) (CA INDEX NAME)

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RN 436157-99-2 CAPLUS

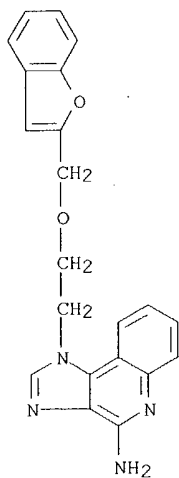
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[1-[(phenylthio)methyl]-1H-1,2,3-triazol-5-yl]methoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 436158-00-8 CAPLUS

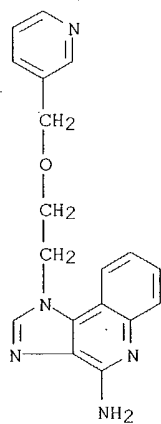
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(2-benzofuranylmethoxy)ethyl]- (9CI) (CA INDEX NAME)

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RN 436158-02-0 CAPLUS

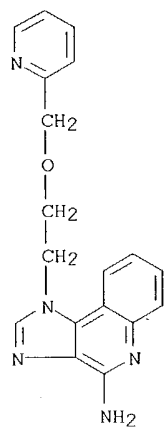
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(3-pyridinylmethoxy)ethyl]-, hydrochloride (4:11) (9CI) (CA INDEX NAME)



● 11/4 HCl

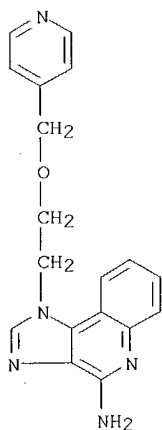
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CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(2-pyridinylmethoxy)ethyl]- (9CI) (CA INDEX NAME)

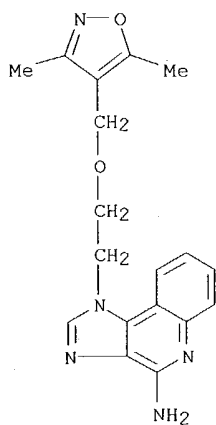


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RN 436158-10-0 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(4-pyridinylmethoxy)ethyl]- (9CI)
(CA INDEX NAME)

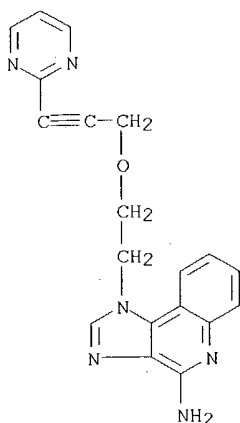


RN 436158-12-2 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[(3,5-dimethyl-4-isoxazolyl)methoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 436158-14-4 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(2-pyrimidinyl)-2-propynyl]oxy]ethyl]- (9CI) (CA INDEX NAME)

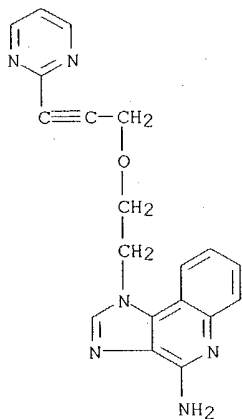
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RN 436158-15-5 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(2-pyrimidinyl)-2-propynyl]oxy]ethyl]-, trifluoroacetate (2:3) (9CI) (CA INDEX NAME)

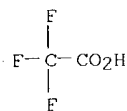
CM 1

CRN 436158-14-4
CMF C19 H16 N6 O



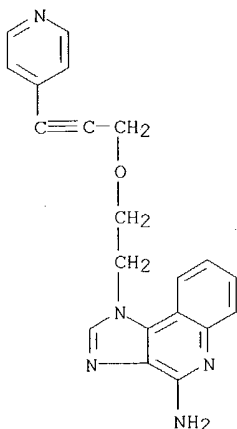
CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 436158-16-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(4-pyridinyl)-2-propynyl]oxy]ethyl]- (9CI) (CA INDEX NAME)

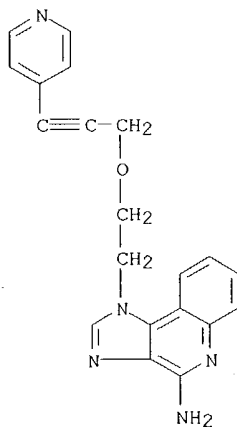
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RN 436158-17-7 CAPLUS
 CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(4-pyridinyl)-2-propynyl]oxy]ethyl]-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

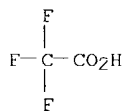
CM 1

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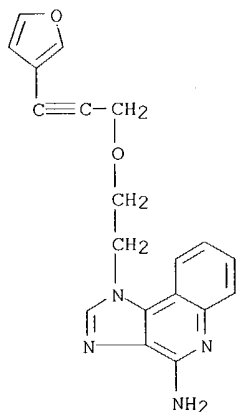
CM 2

CRN 76-05-1
 CMF C2 H F3 O2



RN 436158-18-8 CAPLUS
 CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(3-furanyl)-2-propynyl]oxy]ethyl]- (9CI) (CA INDEX NAME)

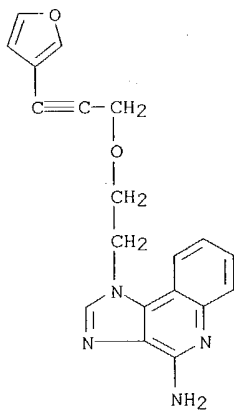
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RN 436158-19-9 CAPLUS
 CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(3-furanyl)-2-propynyl]oxy]ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

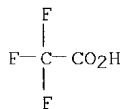
CM 1

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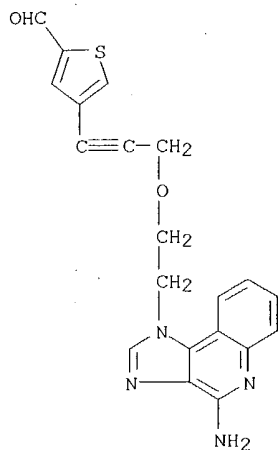
CM 2

CRN 76-05-1
 CMF C2 H F3 O2



RN 436158-20-2 CAPLUS
 CN 2-Thiophenecarboxaldehyde, 4-[3-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]-1-propynyl]- (9CI) (CA INDEX NAME)

10675833



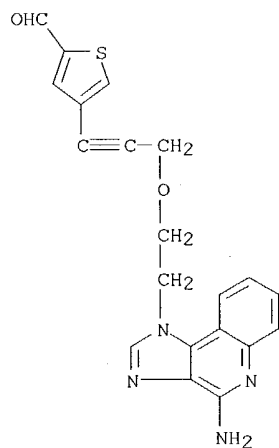
RN 436158-21-3 CAPLUS

CN 2-Thiophenecarboxaldehyde, 4-[3-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]-1-propynyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 436158-20-2

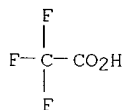
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CM 2

CRN 76-05-1

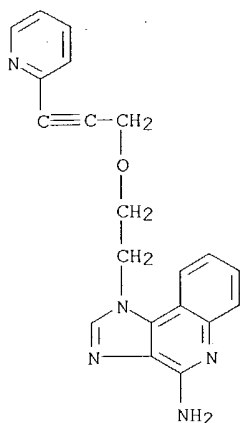
CMF C2 H F3 O2



RN 436158-22-4 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(2-pyridinyl)-2-propynyl]oxy]ethyl]- (9CI) (CA INDEX NAME)

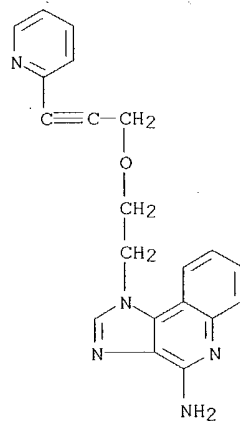
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RN 436158-23-5 CAPLUS
 CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(2-pyridinyl)-2-propynyl]oxy]ethyl]-, trifluoroacetate (4:7) (9CI) (CA INDEX NAME)

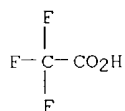
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CRN 436158-22-4
 CME C20 H17 N5 O



CM 2

CRN 76-05-1
 CME C2 H F3 O2

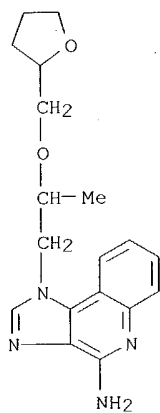


RN 436158-25-7 CAPLUS
 CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[(tetrahydro-2-furanyl)methoxy]propyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

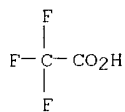
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CRN 436158-24-6

CMF C18 H22 N4 O2

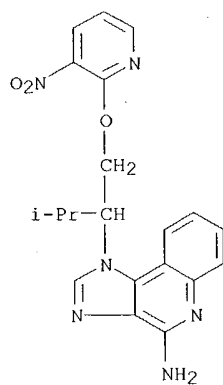


CRN 76-05-1
CMF C2 H F3 O2



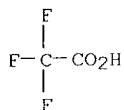
CM 1

CRN 436158-26-8
CMF C20 H20 N6 O3



CRN 76-05-1
CMF C2 H F3 O2

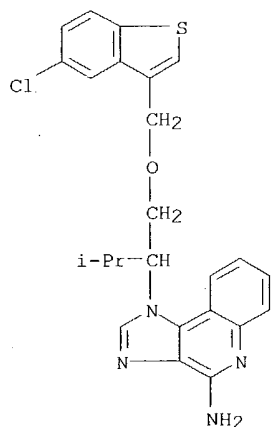
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RN 436158-29-1 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[1-[[[5-chlorobenzo[b]thien-3-yl)methoxy)methyl]-2-methylpropyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

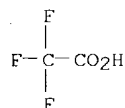
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CMF C24 H23 Cl N4 O S



CM 2

CRN 76-05-1
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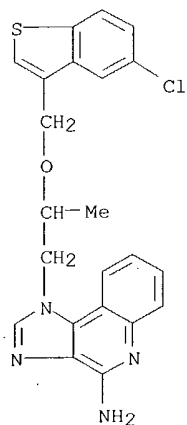


RN 436158-31-5 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[(5-chlorobenzo[b]thien-3-yl)methoxy]propyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 436158-30-4
CMF C22 H19 Cl N4 O S

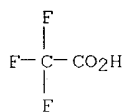
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CM 2

CRN 76-05-1

CMF C2 H F3 O2



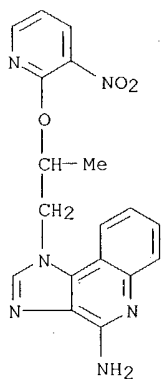
RN 436158-33-7 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[(3-nitro-2-pyridinyl)oxy]propyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 436158-32-6

CMF C18 H16 N6 O3

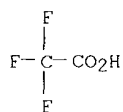


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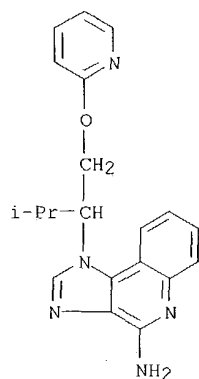
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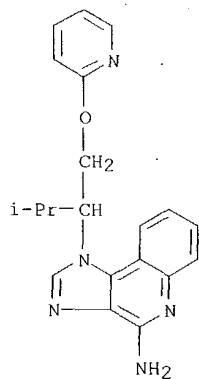
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CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-methyl-1-[(2-pyridinyloxy)methyl]propyl]- (9CI) (CA INDEX NAME)



RN 436158-35-9 CAPLUS
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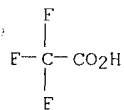
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CM 2

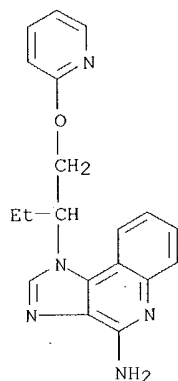
CRN 76-05-1
CMF C2 H F3 O2



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RN 436158-37-1 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[1-[(2-pyridinyloxy)methyl]propyl]-
(9CI) (CA INDEX NAME)

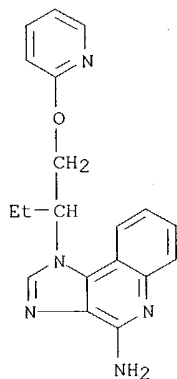


RN 436158-38-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[1-[(2-pyridinyloxy)methyl]propyl]-,
trifluoroacetate (9CI) (CA INDEX NAME)

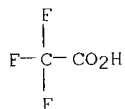
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CRN 436158-37-1
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CM 2

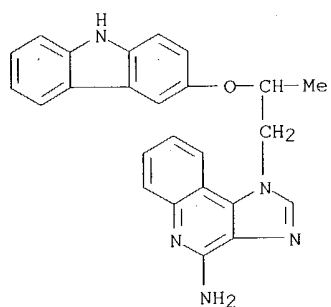
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CMF C2 H F3 O2



RN 436158-39-3 CAPLUS

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(9CI) (CA INDEX NAME)

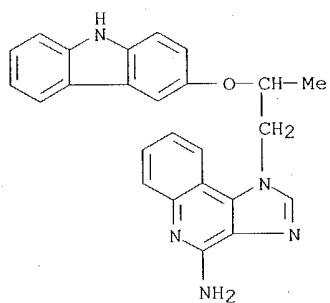
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RN 436158-40-6 CAPLUS
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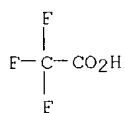
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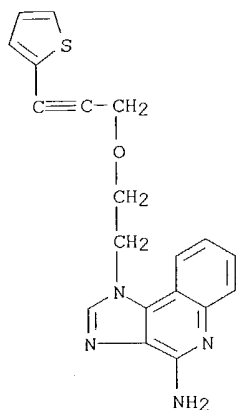
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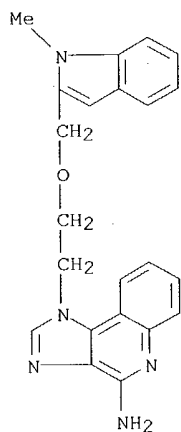


RN 436158-41-7 CAPLUS
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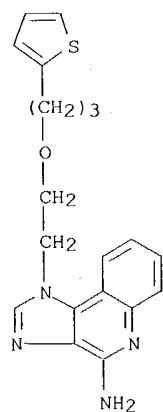
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RN 436158-45-1 CAPLUS
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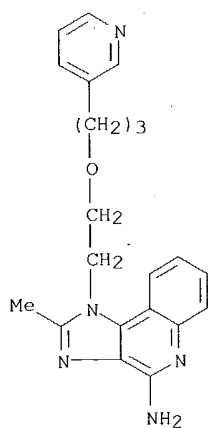
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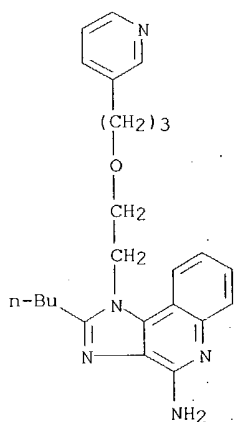
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pyridinyl)propoxy]ethyl]- (9CI) (CA INDEX NAME)



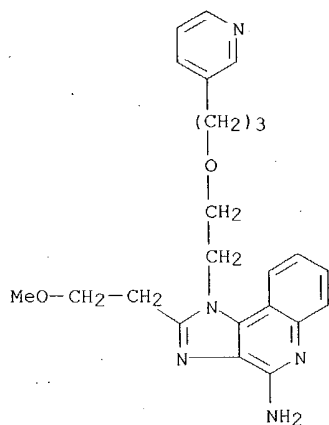
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RN 436158-59-7 CAPLUS

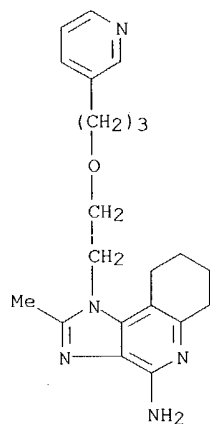
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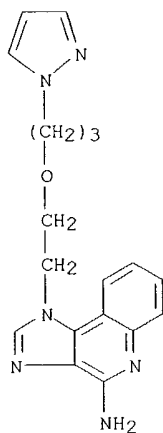
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RN' 436158-66-6 CAPLUS

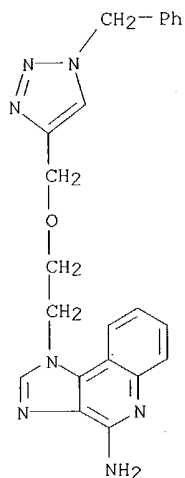
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-(1H-pyrazol-1-yl)propoxy]ethyl]- (9CI) (CA INDEX NAME)



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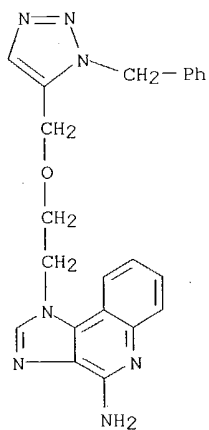
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RN 436158-68-8 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[1-(phenylmethyl)-1H-1,2,3-triazol-5-yl]methoxy]ethyl]- (9CI) (CA INDEX NAME)



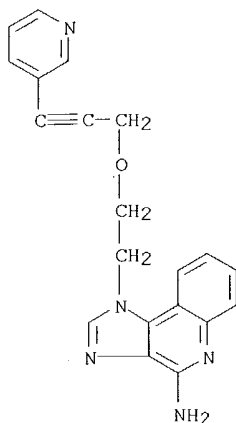
IT 436157-92-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of heterocyclic ether substituted imidazoquinolines as immune response modulators for treatment of viral and neoplastic diseases)

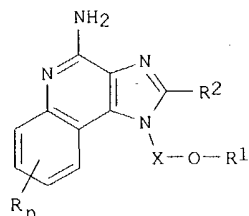
RN 436157-92-5 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[[3-(3-pyridinyl)-2-propynyl]oxy]ethyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:449682 CAPLUS
 DN 137:33298
 TI Preparation of urea substituted imidazoquinoline ethers as immune response modifiers
 IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.
 PA 3M Innovative Properties Company, USA
 SO PCT Int. Appl., 71 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002046191	A2	20020613	WO 2001-US46696	20011206
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	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
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	NO 2003002449	A	20030528	NO 2003-2449	20030528
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	US 2001-11921	A1	20011206		
	WO 2001-US46696	W	20011206		
OS	MARPAT 137:33298				
GI					



AB The title compds. [I; X = (CH₂)₂, CH₂CH₂, etc.; R₁ = R₄NR₈CR₃NR₅ZR₆alkyl, R₄NR₈CR₃NR₅ZR₆aryl, etc.; R₂ = H, alkyl, aryl, etc.; R₃ = O, S; R₄ = alkylene or alkenylene which may be interrupted by one or more O atoms; R₅ = H, alkyl; R₆ = a bond, alkylene or alkenylene which may be interrupted by one or more O atoms; R₈ = H, alkyl, aralkyl; or R₄ and R₈ can join together to form a ring; Z = a bond, CO, SO₂; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain ether and urea functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of the urea I [X = (CH₂)₂; R₁ = (CH₂)₂NMeCONHPh; R₂ = (CH₂)₂OMe; n = 0] which showed the lowest concentration of 0.01 μM and 0.37 μM to induce interferon α and TNFα, resp., was prepared The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

IT 437383-08-9P 437383-09-0P 437383-14-7P
437383-25-0P 437383-26-1P 437383-27-2P
437383-28-3P 437383-29-4P 437383-30-7P
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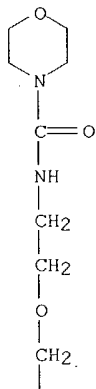
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of urea substituted imidazoquinoline ethers as immune response modifiers)

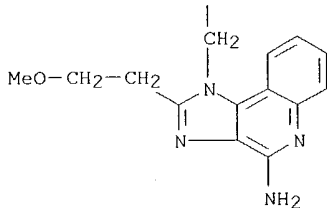
RN 437383-08-9 CAPLUS

CN 4-Morpholinecarboxamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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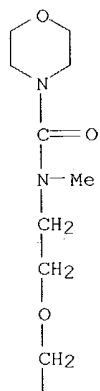


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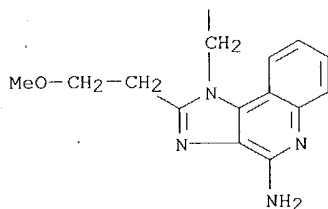
10675833

CN 4-Morpholinecarboxamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A

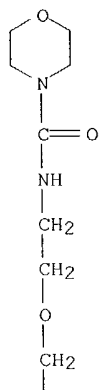


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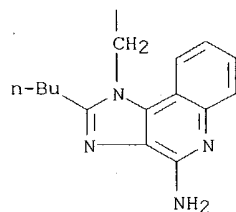


RN 437383-14-7 CAPLUS
CN 4-Morpholinecarboxamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

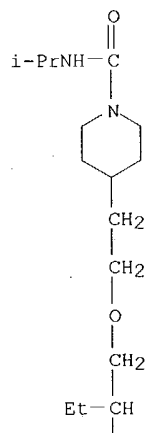


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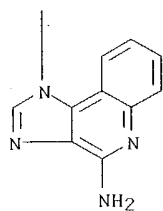


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 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

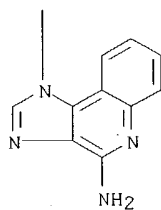
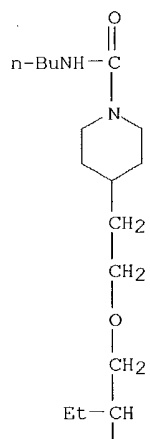
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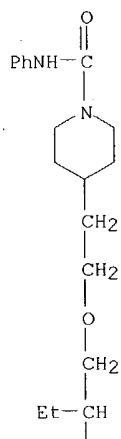
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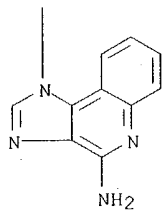


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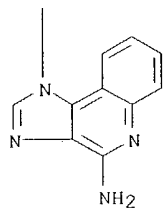
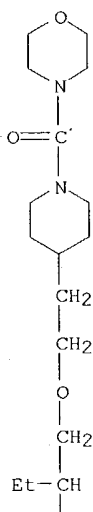


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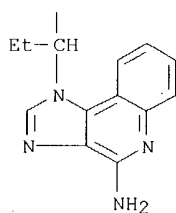
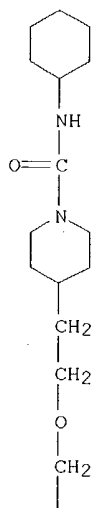




RN 437383-28-3 CAPLUS
 CN Morpholine, 4-[[4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

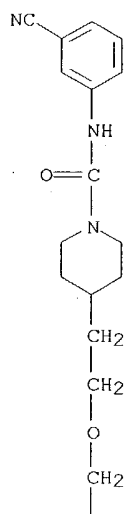


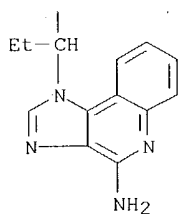
RN 437383-29-4 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-cyclohexyl- (9CI) (CA INDEX NAME)



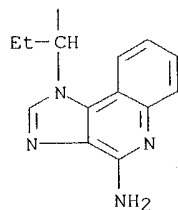
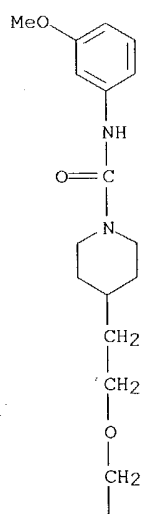
RN 437383-30-7 CAPLUS

1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-(3-cyanophenyl)- (9CI) (CA INDEX NAME)





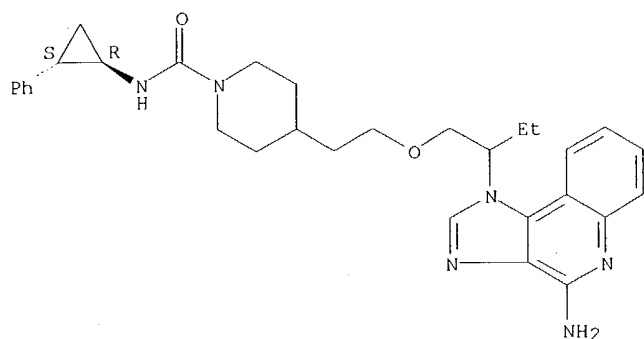
RN 437383-31-8 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 437383-32-9 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-[(1R,2S)-2-phenylcyclopropyl]-, rel- (9CI) (CA INDEX NAME)

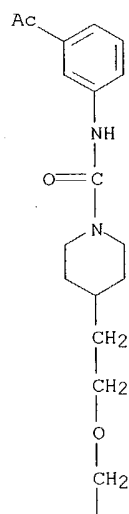
Relative stereochemistry.

10675833

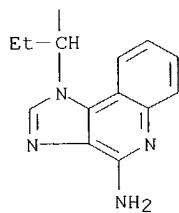


RN 437383-33-0 CAPLUS
CN 1-Piperidinecarboxamide, N-(3-acetylphenyl)-4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]- (9CI) (CA INDEX NAME)

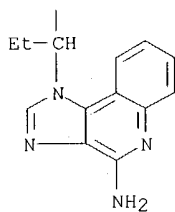
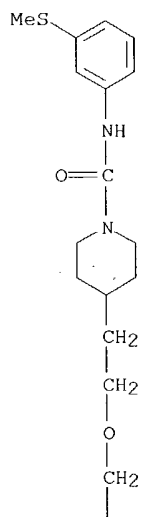
PAGE 1-A



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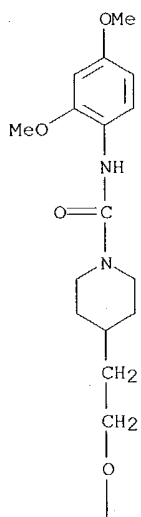


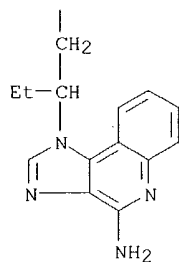
RN 437383-34-1 CAPLUS
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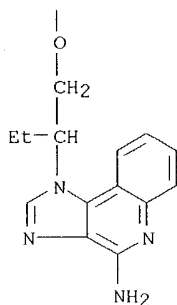
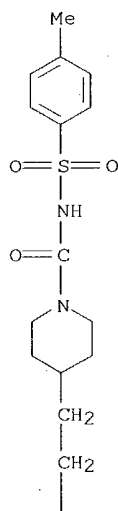
RN 437383-35-2 CAPLUS

CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

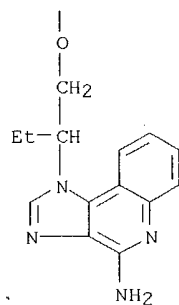
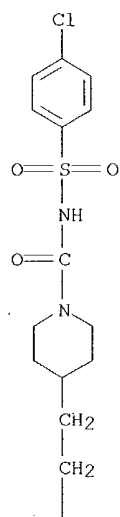




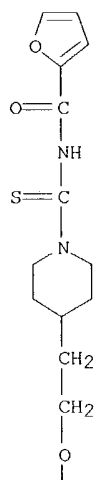
RN 437383-36-3 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



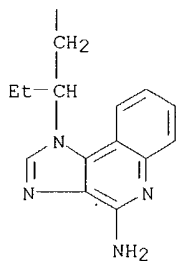
RN 437383-37-4 CAPLUS
 CN 1-Piperidinecarboxamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-[(4-chlorophenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 437383-38-5 CAPLUS
 CN 2-Furancarboxamide, N-[[4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-piperidinyl]thioxomethyl]- (9CI) (CA INDEX NAME)



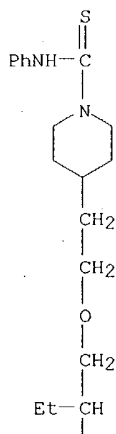
PAGE 2-A



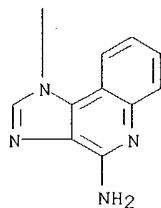
RN 437383-39-6 CAPLUS

CN 1-Piperidinecarbothioamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N-phenyl- (9CI) (CA INDEX NAME)

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IT 436855-93-5P 436857-18-OP

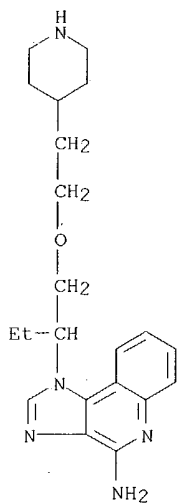
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of urea substituted imidazoquinoline ethers as immune response modifiers)

RN 436855-93-5 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[1-[[2-(4-piperidinyl)ethoxy]methyl]propyl]- (9CI) (CA INDEX NAME)

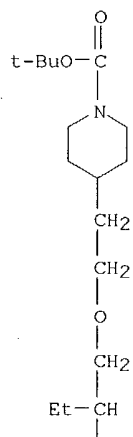
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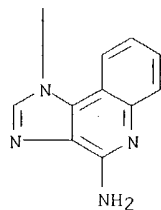
RN 436857-18-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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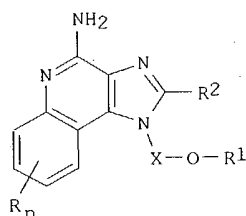
PAGE 2-A



10675833

AN 2002:449681 CAPLUS
 DN 137:33297
 TI Preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers
 IN Crooks, Stephen L.; Greisgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.; Roberts, Ralph R.; Wei, Ai-Ping
 PA 3M Innovative Properties Company, USA
 SO PCT Int. Appl., 74 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002046190	A2	20020613	WO 2001-US46582	20011206
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	US 2001-11921	A1	20011206		
	WO 2001-US46582	W	20011206		
OS	MARPAT 137:33297				
GI					



AB The title compds. [I; X = (CH2)2, (CH2)3, CH2CH2, etc.; R1 = R4NR3SO2R6alkyl, R4NR3SO2R6aryl, etc.; R2 = H, alkyl, alkenyl, etc.; R3 = H, alkyl, aralkyl; R4 = alkylene or alkenylene interrupted by one or more O atoms; or R3R4 can join together to form a ring; R6 = a bond, alkylene or alkenylene which may be interrupted by one or more O atoms; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain substituted amine functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of I [X = (CH2)2; R1 = (CH2)2NMeSO2Me; R2 = (CH2)2OMe; n = 0] which showed the lowest concentration of 0.01 μ M and 0.12 μ M to induce interferon α and TNF α , resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

IT 437382-54-2P 437382-60-OP 437382-69-9P
 437382-76-8P 437382-77-9P 437382-78-0P
 437382-79-1P 437382-80-4P 437382-81-5P
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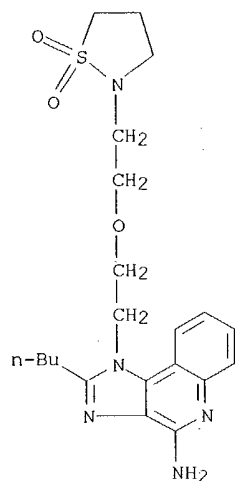
437382-88-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(preparation of sulfonamido ether substituted imidazoquinolines as immune
response modifiers)

RN 437382-54-2 CAPLUS

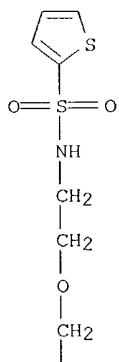
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[2-(1,1-dioxido-2-
isothiazolidinyl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

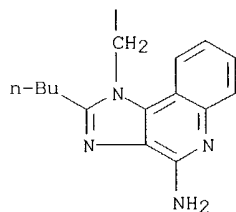


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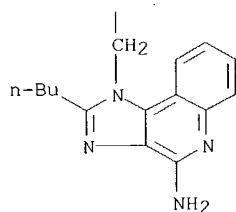
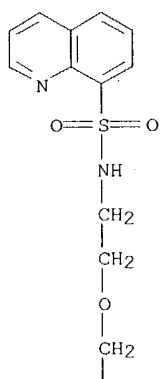
CN 2-Thiophenesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-
1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

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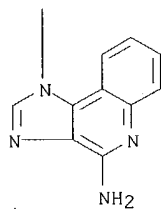
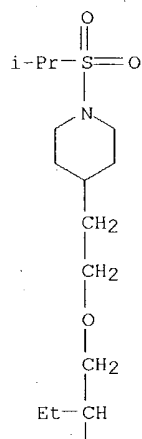




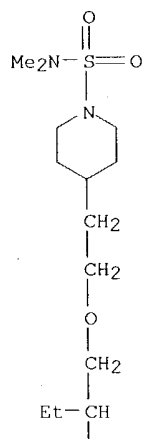
RN 437382-69-9 CAPLUS
 CN 8-Quinolinesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

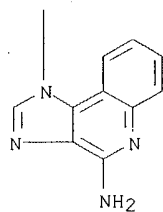


RN 437382-76-8 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-[(1-methylethyl)sulfonyl]- (9CI) (CA INDEX NAME)

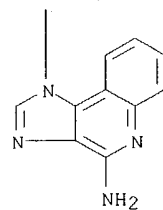
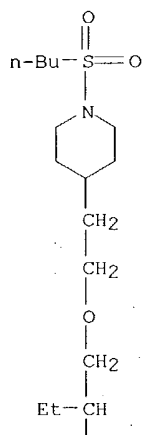


RN 437382-77-9 CAPLUS
 CN 1-Piperidinesulfonamide, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

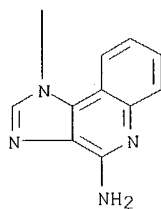
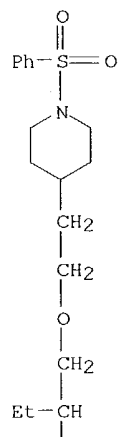




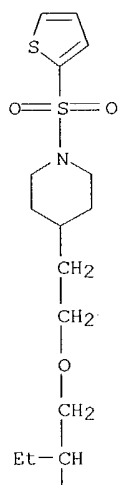
RN 437382-78-0 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-(butylsulfonyl)- (9CI) (CA INDEX NAME)

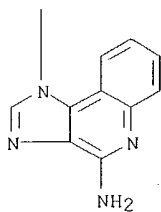


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 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

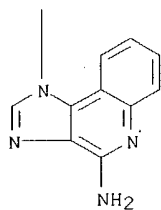
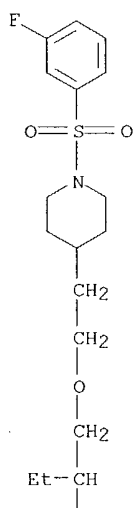


RN 437382-80-4 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-(2-thienylsulfonyl)- (9CI) (CA INDEX NAME)

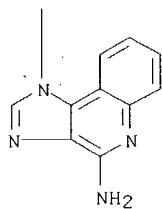
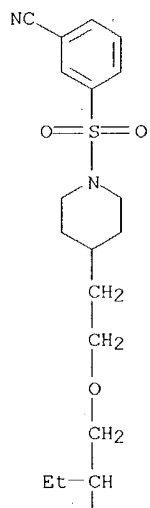




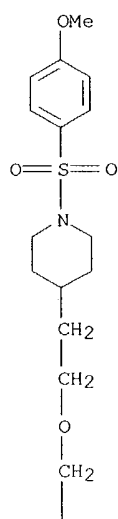
RN 437382-81-5 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[(3-fluorophenyl)sulfonyl]- (9CI) (CA INDEX NAME)



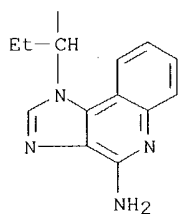
RN 437382-82-6 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[(3-cyanophenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 437382-83-7 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

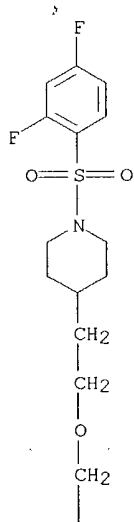


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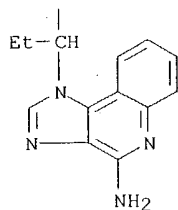


RN 437382-84-8 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
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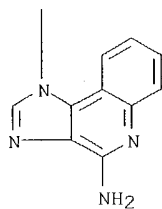
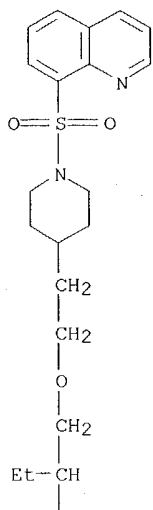
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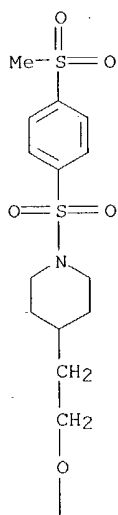
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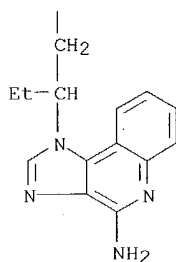


RN 437382-85-9 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
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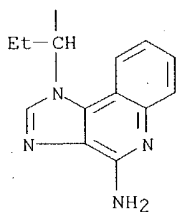
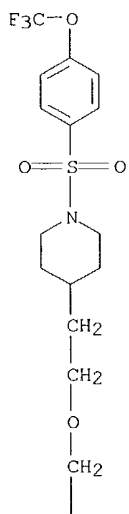


RN 437382-86-0 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
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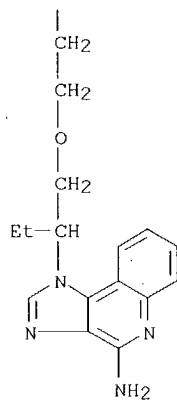
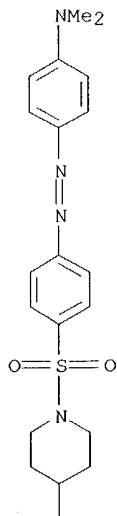




RN 437382-87-1 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[[4-(trifluoromethoxy)phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



RN 437382-88-2 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[[4-[[4-(dimethylamino)phenyl]azo]phenyl]sulfonyl]- (9CI) (CA INDEX
 NAME)



IT **436855-93-5P 436857-18-0P**

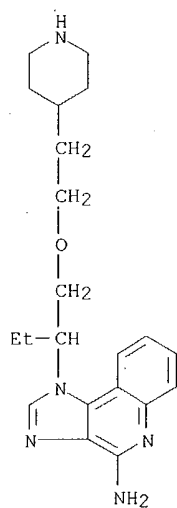
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers)

RN 436855-93-5 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[1-[[2-(4-piperidinyl)ethoxy)methyl]propyl]- (9CI) (CA INDEX NAME)

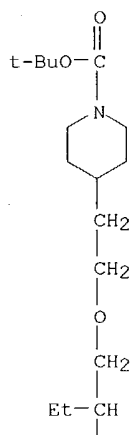
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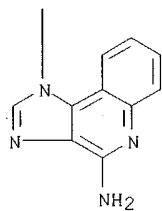
RN 436857-18-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



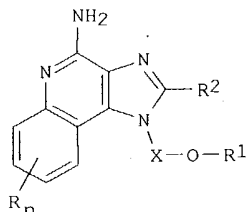
PAGE 2-A



10675833

DN 137:33296
 TI Preparation of aryl ether substituted imidazoquinolines as immune response modifiers
 IN Charles, Leslie J.; Dellaria, Joseph F.; Heppner, Philip D.; Merrill, Bryon A.; Mickelson, John W.
 PA 3M Innovative Properties Company, USA
 SO PCT Int. Appl., 184 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002046189	A2	20020613	WO 2001-US46581	20011206
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	US 2003065005	A1	20030403	US 2001-11921	20011206
	US 6664260	B2	20031216		
	EP 1341789	A2	20030910	EP 2001-987282	20011206
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	NO 2003002452	A	20030716	NO 2003-2452	20030528
	US 2004072858	A1	20040415	US 2003-675833	20030930
PRAI	US 2000-254218P	P	20001208		
	US 2001-11921	A1	20011206		
	WO 2001-US46581	W	20011206		
OS	MARPAT 137:33296				
GI					



I

AB The title compds. [I; X = (CH2)2, CH2CH2, etc.; R1 = alkenyl, aryl, R4-aryl; R2 = H, alkyl, alkenyl, etc.; R4 = alkyl, alkenyl which may be interrupted by one or more O atoms; R3 = H, alkyl; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain ether and aryl or alkenyl functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of I [X = (CH2)2; R1 = CH2C.tplbond.CH; R2 = H; n = 0] which showed the lowest concentration of 0.12 μ M and 1.11 μ M to induce interferon α and TNF α , resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

IT 437600-93-6P 437602-57-8P 437602-63-6P 437603-08-2P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of aryl ether substituted imidazoquinolines as immune response modifiers)

RN 437600-93-6 CAPLUS

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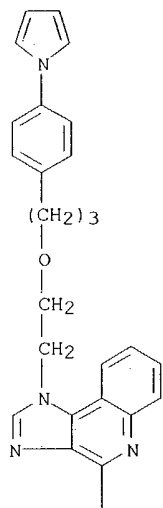
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[3-[4-(1H-pyrrol-1-yl)phenyl]propoxy]ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 437600-92-5

CMF C25 H25 N5 O

PAGE 1-A



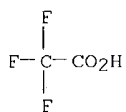
PAGE 2-A



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 437602-57-8 CAPLUS

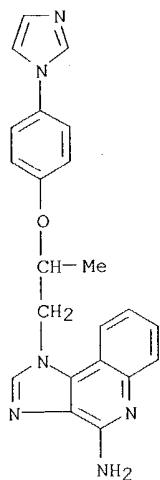
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-[4-(1H-imidazol-1-yl)phenoxy]propyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

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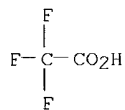
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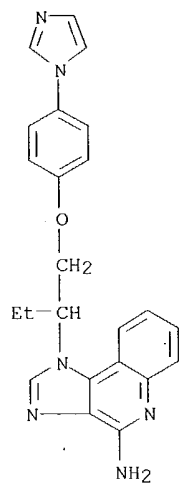
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CMF C2 H F3 O2



RN 437602-63-6 CAPLUS
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CM 1

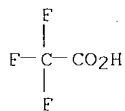
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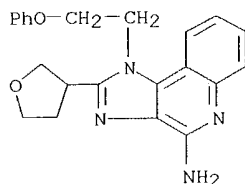
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CRN 76-05-1
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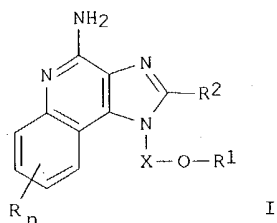


RN 437603-08-2 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-(2-phenoxyethyl)-2-(tetrahydro-3-furanyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:449679 CAPLUS
DN 137:33295
TI Preparation of amido ether substituted imidazoquinolines as immune response modifiers
IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.
PA 3M Innovative Properties Company, USA
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002046188	A2	20020613	WO 2001-US46359	20011206
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	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
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PRAI	US 2000-254218P	P	20001208		
	US 2001-11921	A1	20011206		
	WO 2001-US46359	W	20011206		
OS	MARPAT 137:33295				
GI					



AB The title compds. [I; X = (CH₂)₂, CH(Et)CH₂, etc.; R₁ = (CH₂)₄CONMePh, (CH₂)₂NHCO(cyclohexyl), (CH₂)₂NHCO(1-naphthyl), etc.; R₂ = H, alkyl, alkenyl, etc.; R = alkyl, alkoxy, OH, halo, CF₃; n = 0-4] and their pharmaceutically acceptable salts that contain ether and amide functionality at the 1-position, and are useful as immune response modifiers, were prepared. Thus, reacting 2-(1H-imidazo[4,5-c]quinolin-1-yl)ethanol with 5-bromo-N-methyl-N-phenylpentamide followed by treatment of the resulting N-oxide product with trichloroacetyl isocyanate in CH₂Cl₂, and then treating the intermediate with NaOMe/MeOH afforded I [X = (CH₂)₂; R₁ = (CH₂)₄CONMePh; R₂ = H; n = 0] which showed interferon α induction at 3.33 μ M. The compds. I can induce the biosynthesis of various cytokines, and are useful in the treatment of a variety of conditions, including viral diseases and neoplastic diseases.

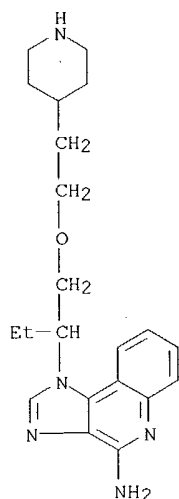
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436856-20-1P 436856-21-2P 436856-22-3P
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436856-26-7P 436856-27-8P 436856-28-9P
436856-29-0P 436856-30-3P 436856-31-4P
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436856-38-1P 436856-40-5P 436856-50-7P
436856-60-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amido ether substituted imidazoquinolines as immune response modifiers)

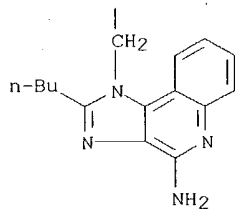
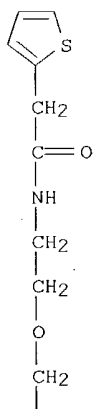
RN 436855-93-5 CAPLUS

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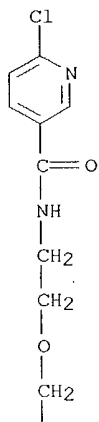


RN 436856-07-4 CAPLUS

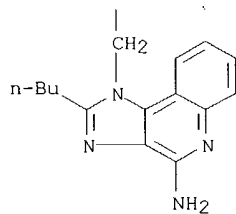
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RN 436856-13-2 CAPLUS
CN 3-Pyridinecarboxamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]-6-chloro- (9CI) (CA INDEX NAME)



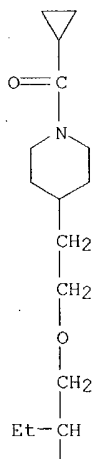
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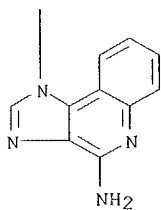
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CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-(cyclopropylcarbonyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

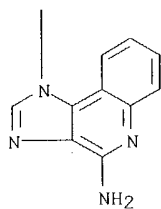
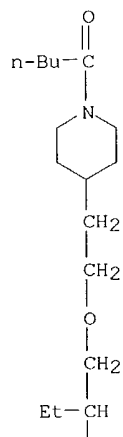


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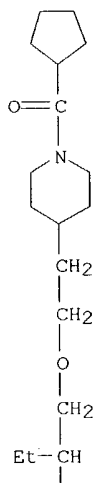


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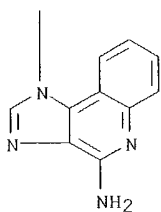
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RN 436856-22-3 CAPLUS
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 1-(cyclopentylcarbonyl)- (9CI) (CA INDEX NAME)

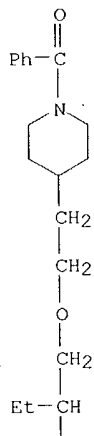


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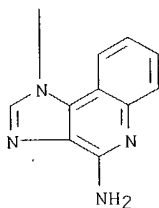


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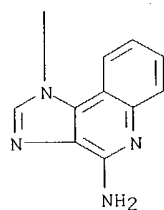
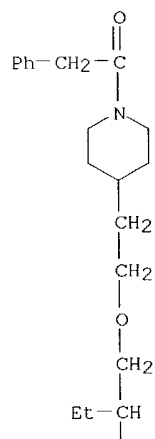
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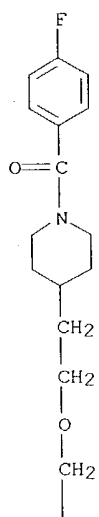
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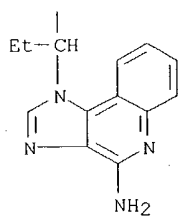
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 1-(phenylacetyl)- (9CI) (CA INDEX NAME)



RN 436856-25-6 CAPLUS
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 1-(4-fluorobenzoyl)- (9CI) (CA INDEX NAME)

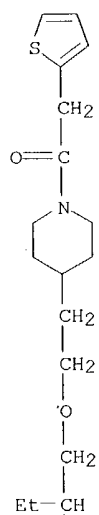


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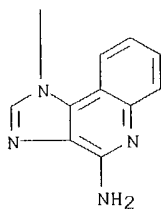


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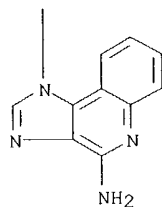
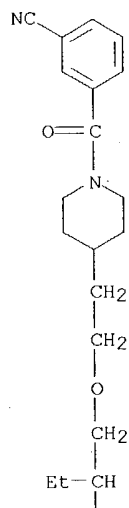
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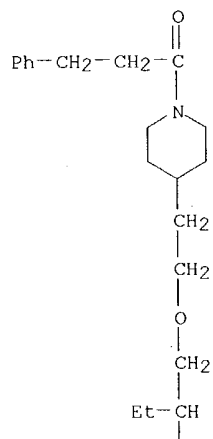
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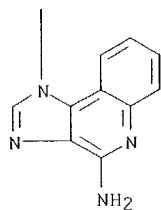


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 1-(3-cyanobenzoyl)- (9CI) (CA INDEX NAME)

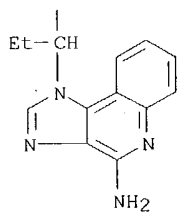
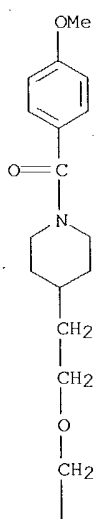


RN 436856-28-9 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-(1-oxo-3-phenylpropyl)- (9CI) (CA INDEX NAME)

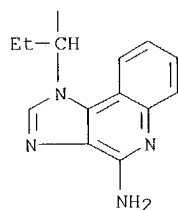
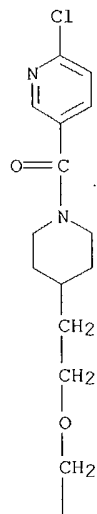




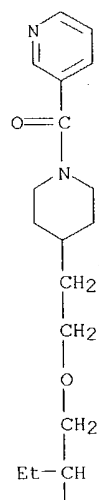
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 1-(4-methoxybenzoyl)- (9CI) (CA INDEX NAME)

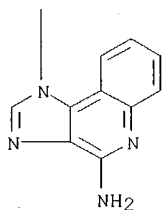


RN 436856-30-3 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[(6-chloro-3-pyridinyl)carbonyl]- (9CI) (CA INDEX NAME)



RN 436856-31-4 CAPLUS
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 1-(3-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)

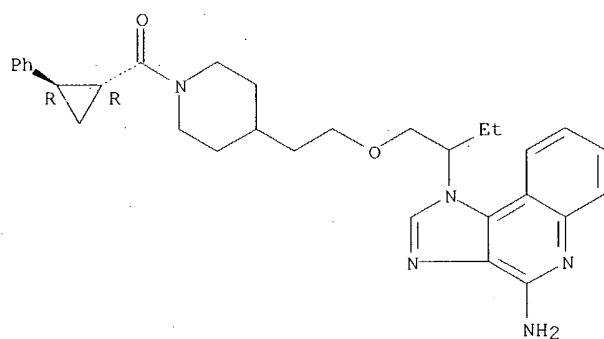




RN 436856-32-5 CAPLUS

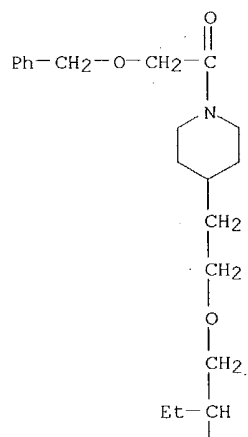
CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-[(1R,2R)-2-phenylcyclopropyl]carbonyl-, rel- (9CI) (CA INDEX NAME)

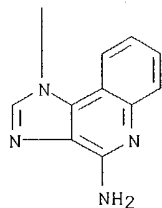
Relative stereochemistry.



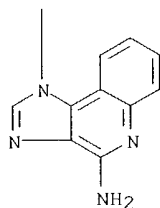
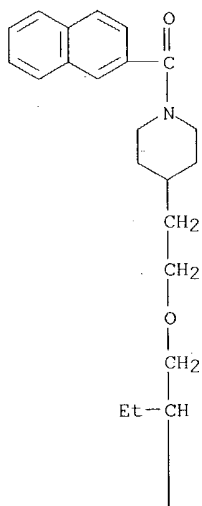
RN 436856-34-7 CAPLUS

CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-[(phenylmethoxy)acetyl]- (9CI) (CA INDEX NAME)

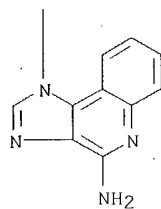
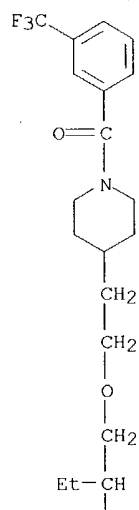




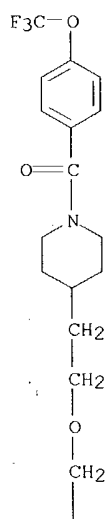
RN 436856-36-9 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-(2-naphthalenylcarbonyl)- (9CI) (CA INDEX NAME)

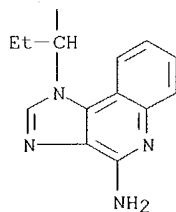


RN 436856-38-1 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[3-(trifluoromethyl)benzoyl]- (9CI) (CA INDEX NAME)

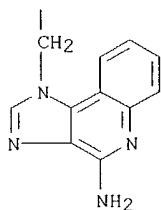
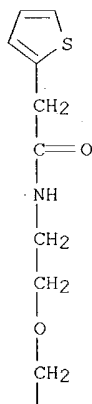


RN 436856-40-5 CAPLUS
 CN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-
 1-[4-(trifluoromethoxy)benzoyl]- (9CI) (CA INDEX NAME)

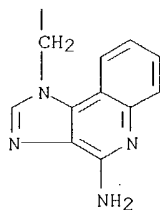
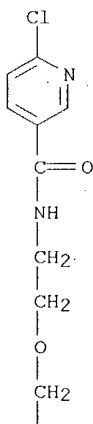




RN 436856-50-7 CAPLUS
 CN 2-Thiopheneacetamide, N-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 436856-60-9 CAPLUS
 CN 3-Pyridinecarboxamide, N-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]-6-chloro- (9CI) (CA INDEX NAME)



IT 436857-18-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amido ether substituted imidazoquinolines as immune response modifiers)

RN 436857-18-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

